STR-GX40ES/GX50ES/GX60ES

SERVICE MANUAL

US Model
Canadian Model

Photo : STR-GX60ES

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 8 ohm load, both channels driven, from 20 – 20,000 Hz, rated 50 watts (STR-GX40ES), 80 watts (STR-GX50ES) or 100 watts (STR-GX60ES) per channel minimum RMS power, with no more than 0.08 % total harmonic distortion from 250 milliwatts to rated output.

Other Specifications

Amplifier section

Dynamic power output

STR-GX40ES
- 75 watts + 75 watts (8 ohms, at 1 kHz IHF)
- 100 watts + 100 watts (4 ohms, at 1 kHz IHF)
- 105 watts + 105 watts (2 ohms, at 1 kHz IHF)

STR-GX50ES
- 105 watts + 105 watts (8 ohms, at 1 kHz IHF)
- 160 watts + 160 watts (4 ohms, at 1 kHz IHF)
- 185 watts + 185 watts (2 ohms, at 1 kHz IHF)

STR-GX60ES
- 130 watts + 130 watts (8 ohms, at 1 kHz IHF)
- 200 watts + 200 watts (4 ohms, at 1 kHz IHF)
- 240 watts + 240 watts (2 ohms, at 1 kHz IHF)

Harmonic distortion
- Less than 0.08% at rated output

Frequency response
- PHONO: RIAA equalization curve ± 0.5 dB
- CD, DAT, TAPE, VIDEO 1,2 (AUDIO), ADAPTOR, TAPE MONITOR: 5 Hz – 50 kHz $^{+0}_{-1}$ dB

Residual noise: Less than 70 μV (8 ohms, network A)

Damping factor: 50 (8 ohms, 1 kHz)

Inputs

	Sensitivity	Impedance	S/N(weighting network, input level)
PHONO	2.5 mV	50 kilohms	87 dB 79 dB* (A, 2.5 mV)
CD, VIDEO (1), 2 TAPE, DAT TAPE MONITOR	150 mV	50 kilohms	105 dB 86 dB* (A, 150 mV)

* '78 IHF

Outputs
- VIDEO (1) AUDIO OUT
- REC OUT
  - Voltage 150 mV
  - Impedance 10 kilohms
- SPEAKER A, B
  - Accepts speakers of 4 – 16 ohms.
- HEADPHONES
  - Accepts low and high impedance headphones.

— Continued on page 2 —

FM STEREO/FM-AM RECEIVER

SONY®

Video inputs	VIDEO 1, 2: 1 Vp-p, 75 ohms
Video outputs	VIDEO 1, MONITOR: 1 Vp-p, 75 ohms
Tone controls	BASS: ±8 dB at 100 Hz TREBLE: ±8 dB at 10 kHz
Muting	−20 dB

FM/AM tuner section

	FM tuner section	AM tuner section
Tuning	87.5 — 108 MHz	530 — 1,710 kHz (with the AM tuning interval set at 10 kHz) 531 — 1,710 kHz (with the AM tuning interval set at 9 kHz)
Antenna	300 ohms, balanced 75 ohms, unbalanced	External antenna terminal, loop antenna
Intermediate frequency	10.7 MHz	450 kHz
Sensitivity at 50 dB quieting	18.3 dBf, 4.5μV (mono) 38.3 dBf, 45μV (stereo)	—
Usable sensitivity	11.2 dBf, 2μV (IHF)	Loop antenna: 50 dB/m (at 1,000 kHz) External antenna: 100μV (at 1,000 kHz)
Signal-to-noise ratio	82 dB (mono) 76 dB (stereo)	54 dB (at 50 mV/m)
Harmonic distortion	0.1% (mono), 0.2% (stereo) at 1 kHz	0.3% (at 50 mV/m, 400 Hz)
Selectivity	60 dB at 400 kHz	40 dB at 10 kHz 35 dB at 9 kHz
Separation	45 dB at 1 kHz	
Frequency response	30 Hz — 15 kHz $^{+0.5}_{-1.5}$ dB	
IM distortion	0.1% (mono) 0.2% (stereo)	
Capture ratio	1.2 dB	
AM suppression ratio	54 dB	
Image response ratio	80 dB	
IF response ratio	90 dB	
Spurious response ratio	100 dB	
RF Intermodulation	65 dB (800 kHz)	
Auto tuning threshold	30 dBf	

General

System
Tuner section: PLL quartz-locked digital synthesizer system
Preamplifier section: low-noise NF type equalizer amp
Power amplifier section: pure-complementary SEPP

Power requirements
120 V AC, 60 Hz

Power consumption

	USA model	Canadian model
STR-GX40ES	140 watts	270 VA
STR-GX50ES	170 watts	330 VA
STR-GX60ES	210 watts	430 VA

AC outlets: Two switched (total 100 watts)
Dimensions: Approx. 430 × 135 × 375 mm (w/h/d) (17 × 5³/₈ × 14³/₄ inches) including projecting parts and controls
Weight:
STR-GX40ES
Approx. 8.3 kg (18 lb 5 oz) net
Approx. 9.5 kg (21 lb) in shipping carton
STR-GX50ES
Approx. 8.8 kg (19 lb 7 oz) net
Approx. 10.2 kg (22 lb 8 oz) in shipping carton
STR-GX60ES
Approx. 10.1 kg (22 lb 5 oz) net
Approx. 11.5 kg (25 lb 6 oz) in shipping carton

Accessories supplied
FM ribbon antenna (1)
AM loop antenna (1)
Remote Commander (1)
RM-S103 (STR-GX40ES)
RM-U203 (STR-GX50ES)
RM-P303 (STR-GX60ES)
Sony batteries SUM-3(NS) (for the remote commander) (2)

Design and specifications subject to change without notice.

This instruction manual covers the STR-GX40ES, STR-GX50ES, and STR-GX60ES.
The differences between these models are shown in the table below.

	STR-GX40ES	STR-GX50ES	STR-GX60ES
DAT button, and DAT REC OUT and IN jacks	Not equipped	Equipped	Equipped
VIDEO 1 button, and VIDEO 1 VIDEO/ AUDIO IN and OUT jacks	Not equipped	Equipped	Equipped
VIDEO 2 button, and VIDEO 2 VIDEO IN and AUDIO IN jacks	Not equipped	Equipped	Equipped
VIDEO button, and VIDEO AUDIO IN and OUT jacks	Equipped	Not equipped	Not equipped
MONITOR VIDEO OUT jack	Not equipped	Equipped	Equipped
ADAPTOR button and ADAPTOR OUT and IN jacks	Not equipped	Not equipped	Equipped
TAPE MONITOR button and TAPE MONITOR REC OUT and IN jacks	Equipped	Equipped	Not equipped
REC OUT SELECTOR	Not equipped	Not equipped	Equipped
Power output	50 W/ channel	80 W/ channel	100 W/ channel

SAFETY CHECK-OUT (US Model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

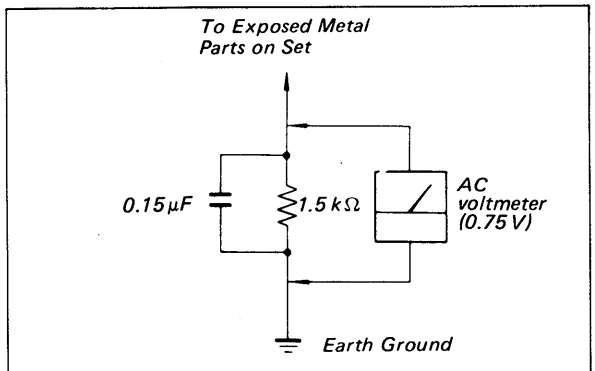

Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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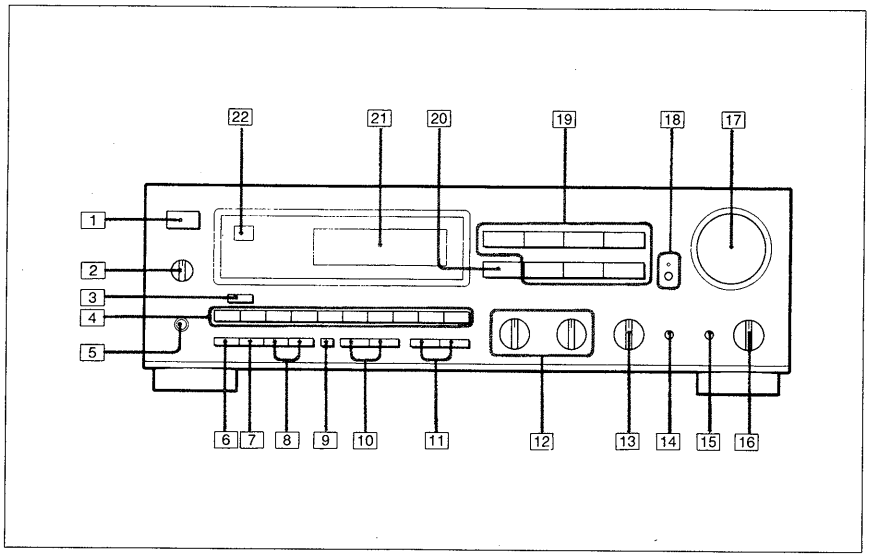
ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

1-1. PART IDENTIFICATION

Front Panel



1 **POWER switch**

2 **SPEAKERS selector**

3 **SHIFT (memory page select) button**

4 **Numeric buttons**

5 **HEADPHONES jack**

6 **FM MODE button**

7 **FM TUNE MODE (FM tuning mode) selector**

8 **BAND selectors**

9 **MEMORY button**

10 **TUNING buttons**

11 **PRESET TUNING buttons**

12 **BASS and TREBLE tone controls**

13 **REC OUT SELECTOR** (recording output selector) (STR-GX60ES only)

14 **SOURCE DIRECT switch**

15 **LOUDNESS switch**

16 **BALANCE control**

17 **ATTENUATOR knob and indicator**

18 **MUTING switch and indicator**

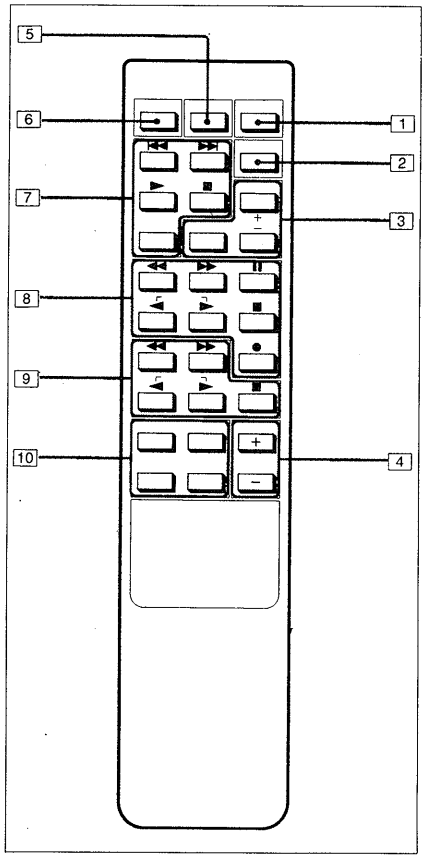
19 **FUNCTION selectors**

20 **ADAPTOR switch** (STR-GX60ES)
TAPE MONITOR switch (STR-GX40ES/STR-GX50ES)

21 **Display window**

22 **Remote control sensor**

Remote Commander RM-S103 (supplied with the STR-GX40ES)



1 **POWER switch**

2 **DBFB button**
This button does not operate with this receiver.

3 **TUNER PRESET +/− and SHIFT buttons**

4 **VOLUME +/− buttons**

5 **SURROUND button**
This button does not operate with this receiver.

6 **MUTING button**

7 **CD player operation buttons***
D (disc) SKIP: When your CD player is equipped with a multi-disc changer, use this button to select loaded disc.
CD ▶: Selects the CD function and starts CD playback.

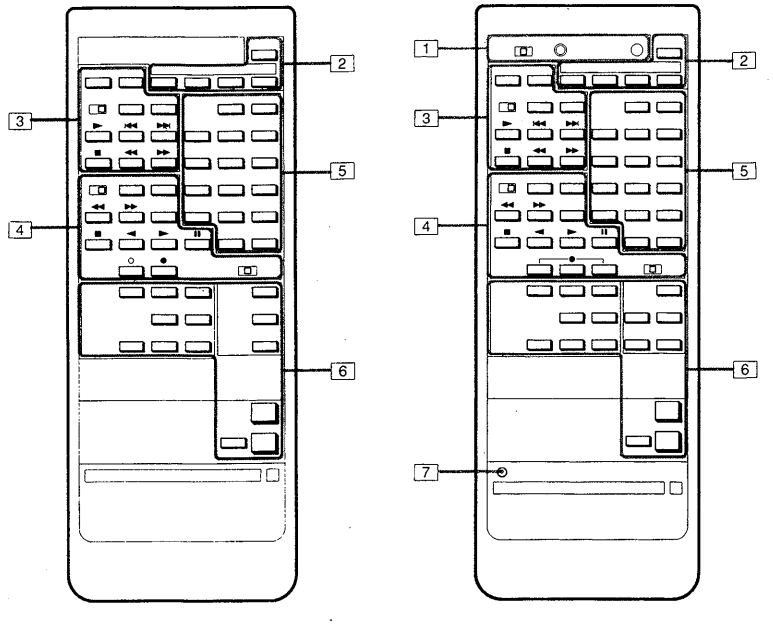
8 **DECK B operation buttons***
DECK B ◀◀/▶▶: Select tape function and start tape playback on deck B.

9 **DECK A operation buttons***
DECK A ◀◀/▶▶: Select tape function and start tape playback on deck A.

10 **Function selectors**

* These buttons control Sony audio components.

Remote Commander RM-U203 (supplied with the STR-GX50ES)/RM-P303 (supplied with the STR-GX60ES)



RM-U203 RM-P303

1 Program control section (RM-P303 only)
Mode selector and indicator
SONY STD: To control Sony equipment.
USER STD: To control equipment whose remote control functions are stored.
LEARN: To store functions of other remote commanders emitting infrared rays.
PROGRAM CLEAR button: Clears the stored functions.

2 Power control section
SYSTEM OFF button: Turns off the power of the whole system: LDP, VTR, TV and AUDIO.
LDP/VTR/TV/AUDIO POWER buttons: Control the power of each unit.

3 CDP/LDP control section
CDP/LDP selector: Selects CDP (CD player) or LDP (Laser disc player) to be played.
CONTINUE: Continuous play (only for CD player)
SHUFFLE: Shuffle play (only for CD player)
PGM: Program play (only for CD player)
D (disc) SKIP: Disc skip (for a CD player equipped with a multi-disc changer)
▶: Starts play.
I◀◀/▶▶I: Locates a desired selection
■: Stops play.
◀◀/▶▶: Manual search

4 TAPE/DAT/VTR control section
TAPE/VTR selector: Selects TAPE (tape deck) or VTR(VCR) to be controlled.
ANT TV/VTR button: Selects the output signal from the antenna terminal on the VCR, either a TV signal or VCR programs.
CH +/− buttons: Select channel on the VCR.
◀◀/▶▶: fast winding
■: Stop
◀/▶: Play
❚❚: Pause
O (RM-U203 only): Record muting
● (RM-U203 only): Recording (While pressing ●, press ▶)
REV/● REC/FWD buttons (RM-P303 only):
For reverse recording, press REV and REC together.
For forward recording, press FWD and REC together.
DECK/VTR selector
DECK A, B, and DAT: Select A, B, or DAT.
VTR 1,2, and 3: Select VCR type.
1: Betamax VCRs
2: 8mm VCRs
3: VHS VCRs

5 TV control section
VOL +/− buttons: Control the TV volume.
CH +/− buttons: Select a preset channel.
Program number (1 to 0) and ENTER buttons: Select the channel.

6 Receiver control section
FUNCTION selectors:
Select an input source of the receiver.
SHIFT button: Selects a memory page.
TUNER PRESET station select buttons:
Select a preset station.
PHONO START button (RM-P303 only):
Starts record playing.
PHONO STOP button (RM-P303 only):
Stops record playing.
MUTING button: Mutes the sound.
MASTER VOL +/− buttons:
Control the receiver volume.

7 RESET button (RM-P303 only)
Reset the commander to the initial state.

Notes
- SHUFFLE and PGM modes of some CD players cannot be cleared by this remote commander. In such cases, clear the modes using the CD player itself or with the remote commander supplied with the CD player.

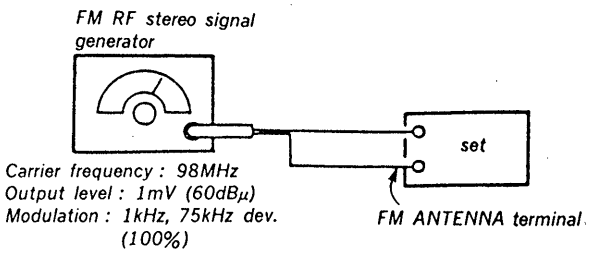
Note on the ● (recording)button under 4 TAPE/DAT/VTR buttons
If your recorder is of such type as pressing ● puts it in recording pause mode, first press ● on this commander and then ❚❚.

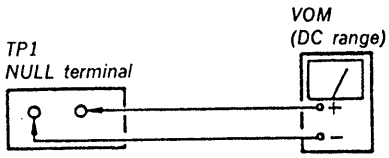
SECTION 2
ELECTRICAL ADJUSTMENTS

FM SECTION

• FM Discriminator (NULL) Adjustment

Setting :


FM RF stereo signal generator
set
Carrier frequency : 98MHz
Output level : 1mV (60dBμ)
Modulation : 1kHz, 75kHz dev. (100%)
FM ANTENNA terminal



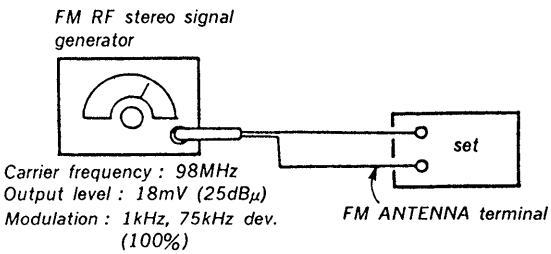
Procedure :

1. Tune the set to 98MHz.
2. Adjust T21 for 0V reading on the VOM.

Note : FM Tuning Level adjustment should be made after FM discriminator adjustment.

• FM Stereo Operation Level Adjustment

Setting :

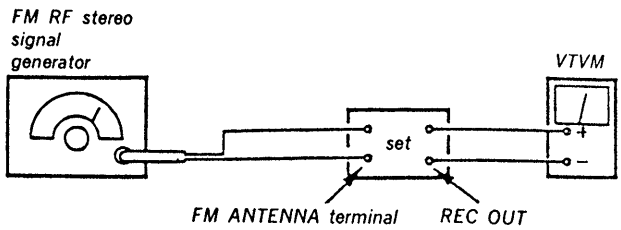

FM RF stereo signal generator
set
Carrier frequency : 98MHz
Output level : 18mV (25dBμ)
Modulation : 1kHz, 75kHz dev. (100%)
FM ANTENNA terminal

Procedure :

1. Tune the set to 98MHz.
2. Adjust RV24 so that the STEREO LED goes on.

• FM Stereo Separation Adjustment

Setting :



Carrier frequency : 98MHz
Output level : 1mV (60dBμ)
Modulation : 1kHz 75kHz dev. (100%)

Procedure :

Tune the set to 98MHz.

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV21 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV21 for minimum reading.

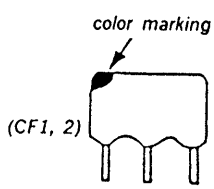
L-CH Stereo separation : Ⓐ−Ⓑ

R-CH Stereo separation : Ⓒ−Ⓓ

The separations of both channels should be equal.

Note on Ceramic Filter (CF1, 2) Replacement.

This set employs two ceramic filters (CF1, 2) which should have the same color marking to identify their center frequency. Therefore FM IF offset adjustment by (* A, * B) connection is necessary to match the center frequency of the ceramic filters used with FM intermediate frequency.



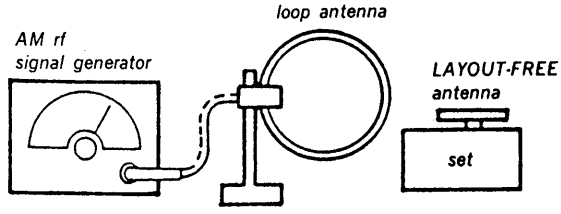
○ : connect
× : not connect

Ceramic filter		Connection		FM intermediate frequency (MHz)
Color mark	Center frequency (MHz)	* A	* B	
White	10.750	○	×	10.750
Red	10.700	×	×	10.700
Black	10.650	○	○	10.650

AM SECTION

• AM Meter Adjustment

Setting :



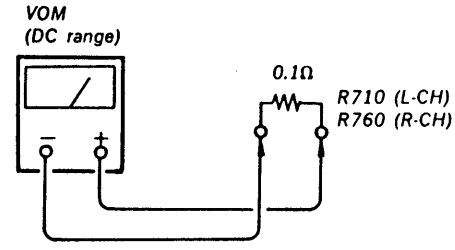
Carrier frequency : 1,050kHz
Modulation 400Hz, 30% modulation

Procedure :

1. Set loop antenna so that the LAYOUT-FREE antenna input level becomes 0.2V (106dBμ)
2. Tune the set to 1,050kHz.
3. Adjust the RV23 so that the 4 point segment of the signal meter goen on.

AUDIO SECTION

• DC BIAS Adjustment (with no signal input)



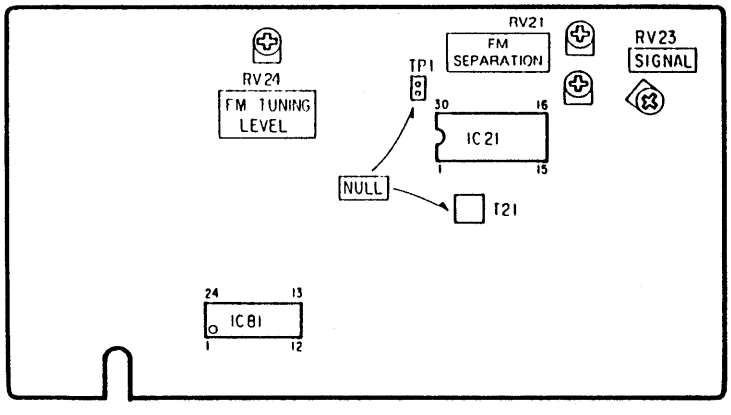
Note : DC BIAS adjustment should be made several minutes after the POWER ON. After replacing the power AMP IC IC701, 751, DC BIAS adjustments should be made.

Procedure :

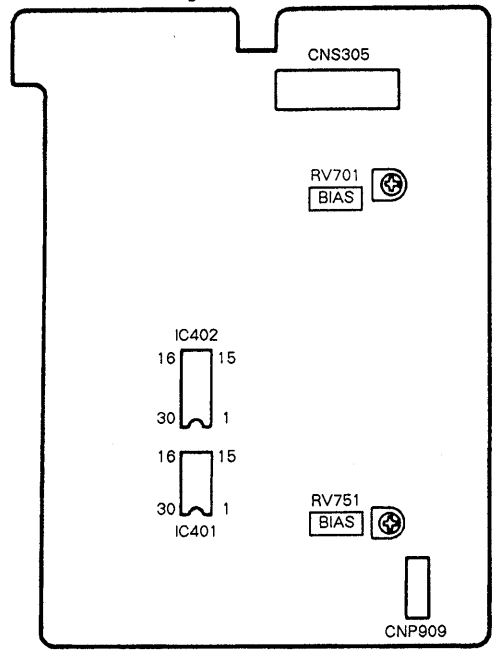
1. Adjust RT701 (Lch) for 5mV readings on the VOM.
2. Adjust RT751 (Rch) for 5mV readings on the VOM.

Adjustment Location :

[TUNER BOARD] (COMPONENT SIDE)

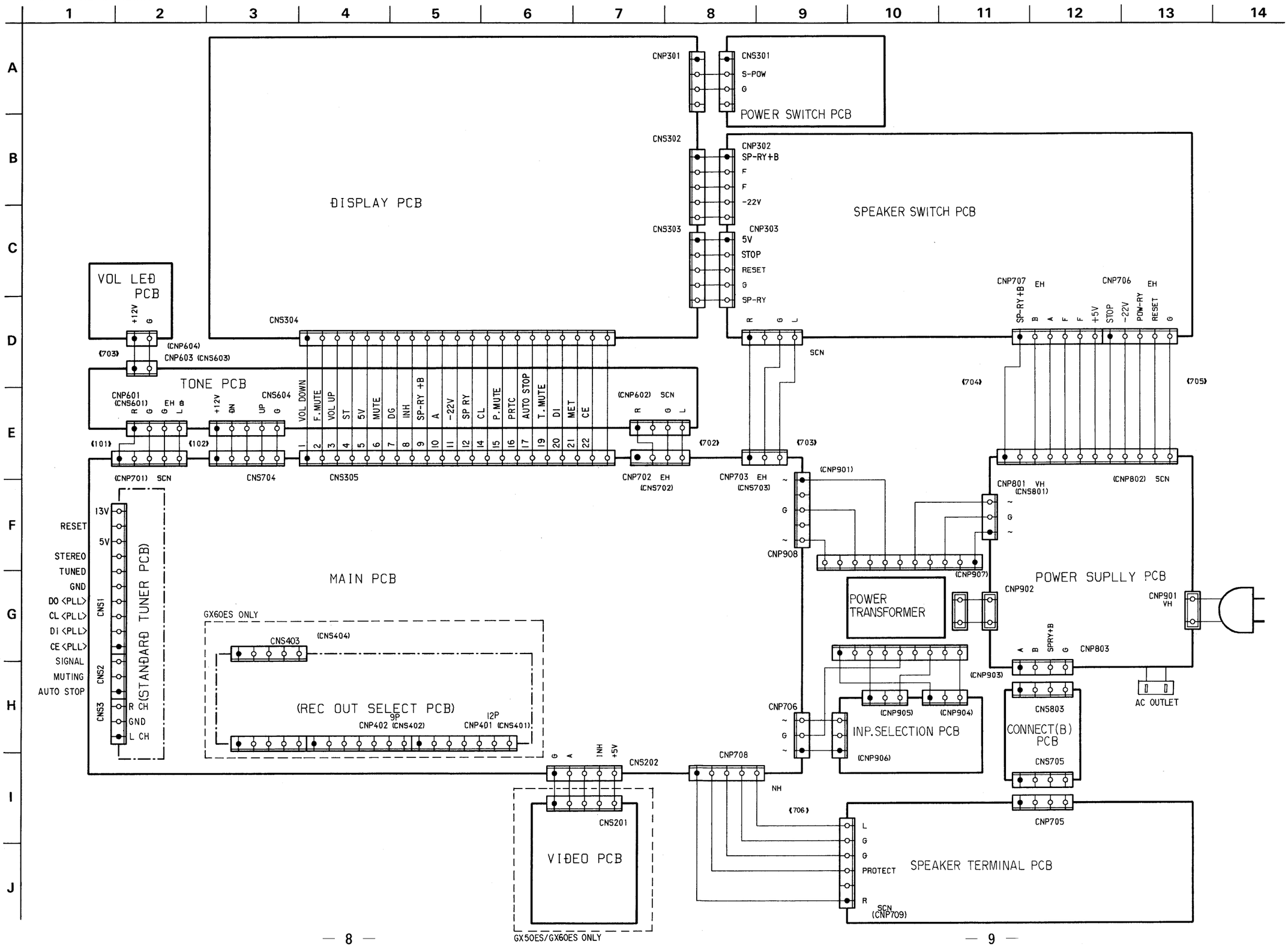


[MAIN BOARD] (COMPONENT SIDE)

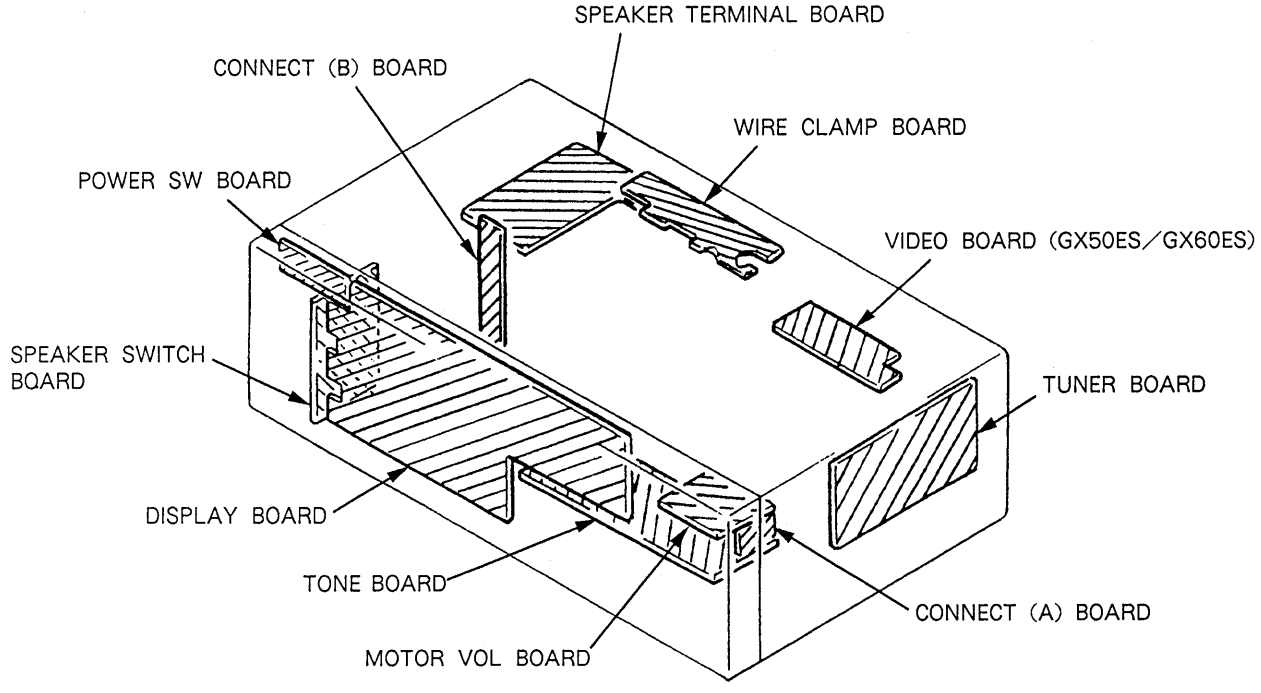


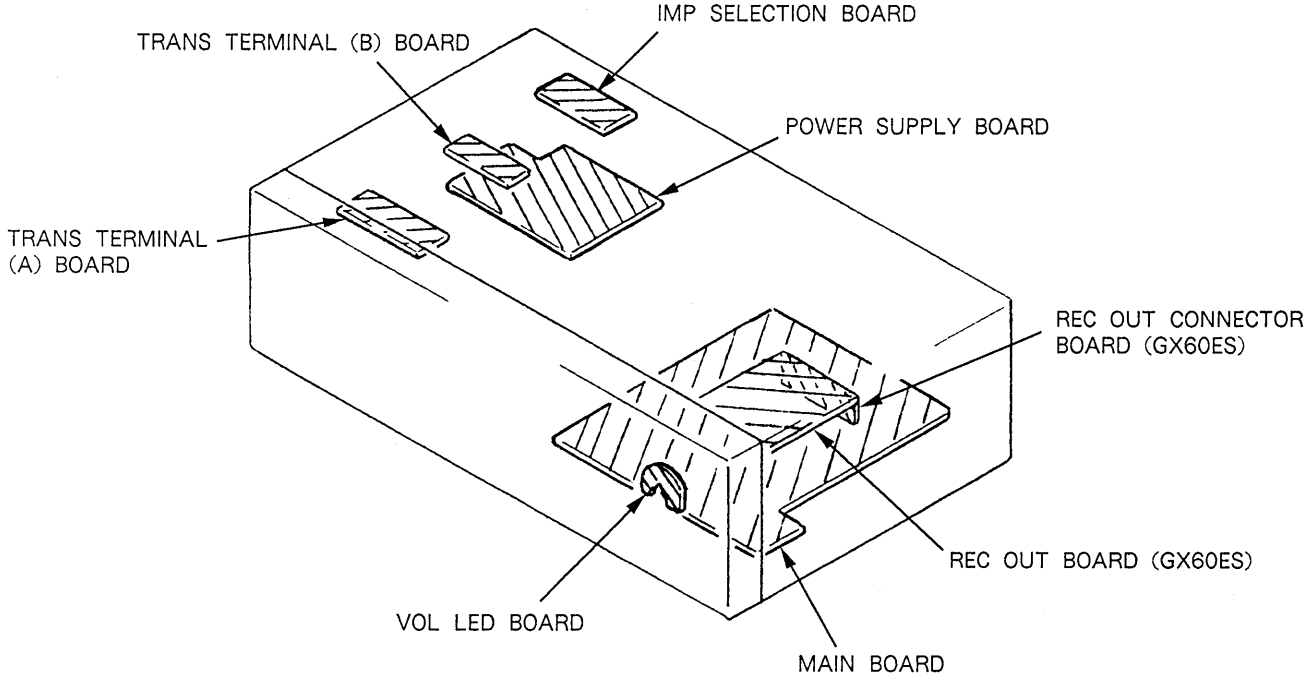
SECTION 3
DIAGRAMS

3-1. FRAME SCHEMATIC DIAGRAM



3-2. CIRCUIT BOARD LOCATION





Note on Schematic Diagram :

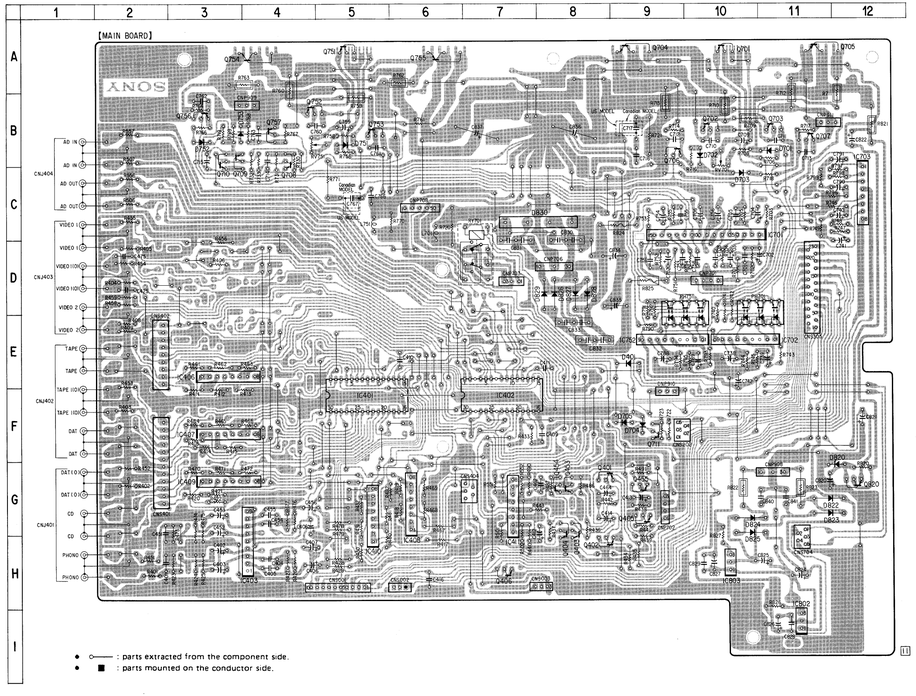
- ∗A, ∗B : See page 6 for Note on Ceramic Filter (CF1, 2) Replacement.
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- FUSE : nonflammable resistor.
- ▬▬ : B+ Line
- ▬ ▬ ▬ : B− Line
- ▭ : adjustment for repair.
- no mark : FM mode
  ( ) : AM mode
- Signal path.
  ⇨ : FM
- Voltages are taken with a VOM.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

3-3. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

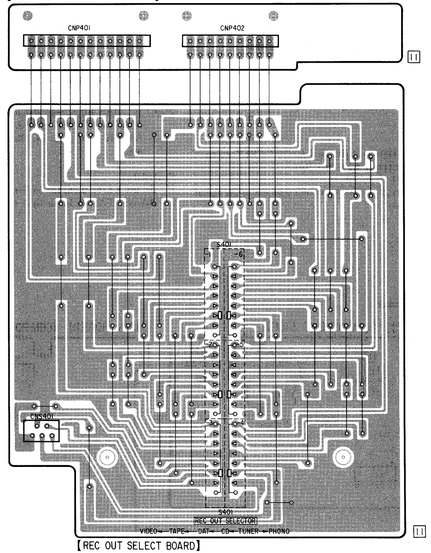
MAIN, REC OUT CONNECTOR, REC OUT SELECT BOARD PRINTED WIRING BOARDS (STR-GX60ES)

Ref. No.	Location	Ref. No.	Location
IC401	F−5	Q751	A−5
IC402	F−7	Q752	B−4
IC403	H−4	Q753	B−5
IC406	E−3	Q754	A−4
IC407	F−3	Q755	A−6
IC408	G−6	Q756	B−3
IC409	G−3	Q757	B−4
IC410	G−5	Q820	G−12
IC411	G−7		
IC701	C−10		
		D401	E−9
IC702	E−10	D701	B−11
IC703	C−12	D702	B−10
IC752	E−9	D703	C−10
IC802	I−11	D704	F−9
IC803	H−10		
		D705	F−9
		D751	B−5
Q401	G−8	D752	B−3
Q402	H−8	D753	B−3
Q403	F−8	D820	G−11
Q404	G−8		
Q405	G−9	D822	G−11
		D823	G−11
Q406	H−7	D824	G−10
Q453	G−8	D825	H−10
Q454	G−8	D826	D−8
Q455	G−9		
Q701	A−10	D827	D−8
		D828	D−8
Q702	B−10	D829	D−8
Q703	B−11	D830	C−7
Q704	A−9		
Q705	A−11		
Q706	B−9	PH701	D−10
		PH751	D−9
Q707	B−11		
Q708	B−4		
Q709	B−3		
Q710	B−3		
Q711	F−9		



◆ ○—— : parts extracted from the component side.
◆ ■ : parts mounted on the conductor side.

【REC OUT CONNECTOR BOARD】



【REC OUT SELECT BOARD】

REVISED

MAIN, REC OUT CONNECTOR, REC OUT SELECT BOARD SCHEMATIC DIAGRAMS (STR-GX60ES)

• Refer to page 11 for Note on Schematic Diagram.

Note :
( ) : S801 SPEAKER IMPEDANCE SELECTOR ..... 4 Ω

Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Note:
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

TO TUNER BOARD (See Page 42)
TO DISPLAY BOARD (See Page 31)
TO TONE BOARD (See Page 38)
TO VIDEO BOARD (See Page 32)
TO TONE BOARD (See Page 38)
TO SPEAKER SWITCH BOARD (See Page 32)
TO SPEAKER TERMINAL BOARD (See Page 37)
(See Page 37)
(See Page 37)

【MAIN BOARD】
【REC OUT SELECT BOARD(1/2)】
【REC OUT SELECT BOARD(2/2)】

IC403 (1/2) μPC4570HA EQ AMP
IC410 (1/2) NJM4580L BUFFER
IC703 (1/2) NJM4580L
IC702 BA6125 CURRENT DET
IC408 (1/2) NJM4580L BUFFER
IC409 (1/2) NJM4580L BUFFER
IC407 (1/2) NJM4580L BUFFER
IC406 (1/2) NJM4580L BUFFER
IC703 (2/2) NJM4580L
IC752 BA6125 CURRENT DET
IC701 POWER AMP
IC701 (1/2)
IC701 STK3102-3 (2/2)
IC402 LC7822 SWITCH
IC401 LC7822
IC407 IC411 (2/2) NJM4580L BUFFER
IC411 (1/2) NJM4580L BUFFER
IC406 (2/2) NJM4580L BUFFER
IC409 (2/2) NJM4580L BUFFER
IC408 (2/2) NJM4580L BUFFER
IC410 (2/2) NJM4580L BUFFER
IC403 (2/2) μPC4570HA EQ AMP
IC406-411, 703 NJM4580L
IC403 UPC4570HA
IC802 REG
IC803 79M12

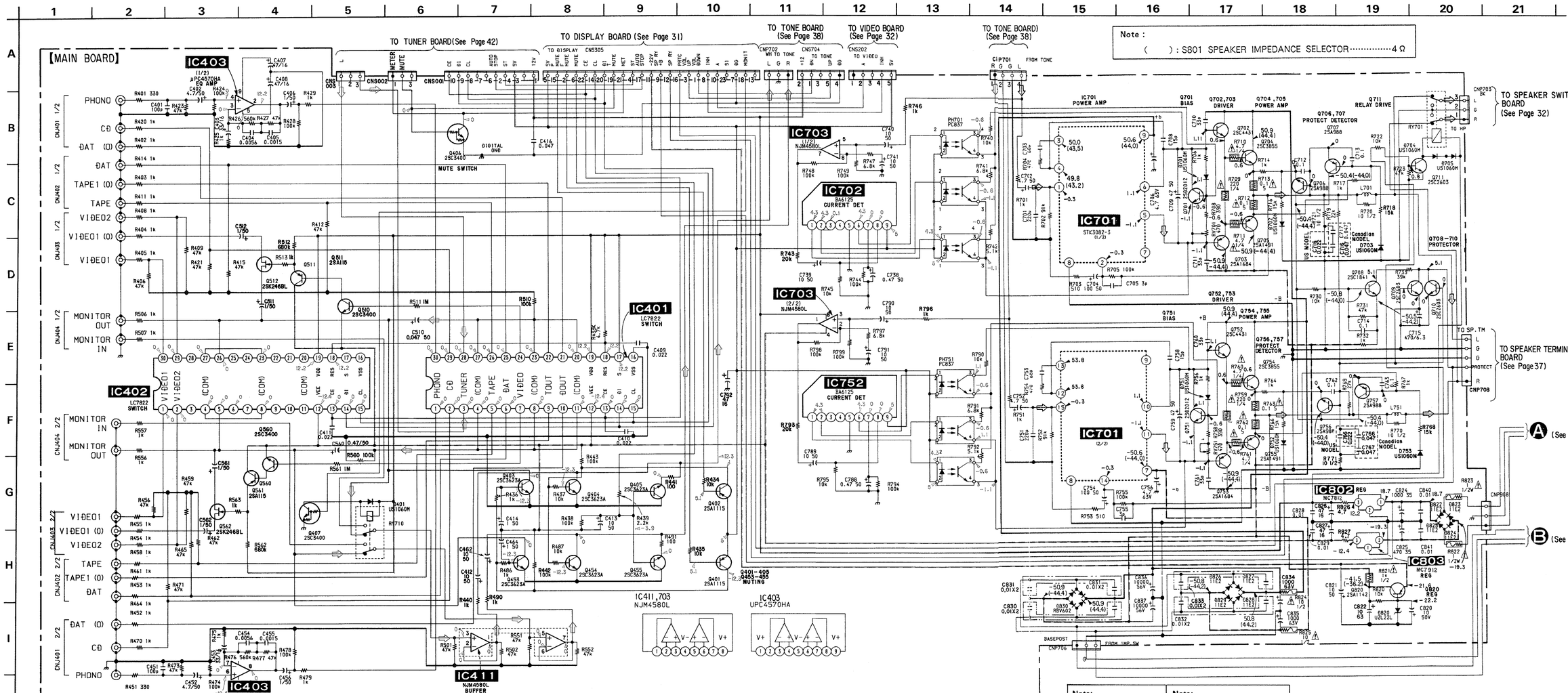
Q701 BIAS
Q702,703 DRIVER
Q704,705 POWER AMP
Q706,707 PROTECT DETECTOR
Q711 RELAY DRIVE
Q708-710 PROTECTOR
Q751 BIAS
Q752,753 DRIVER
Q754,755 POWER AMP
Q756,757 PROTECT DETECTOR
Q820 REG

Canadian MODEL
US MODEL

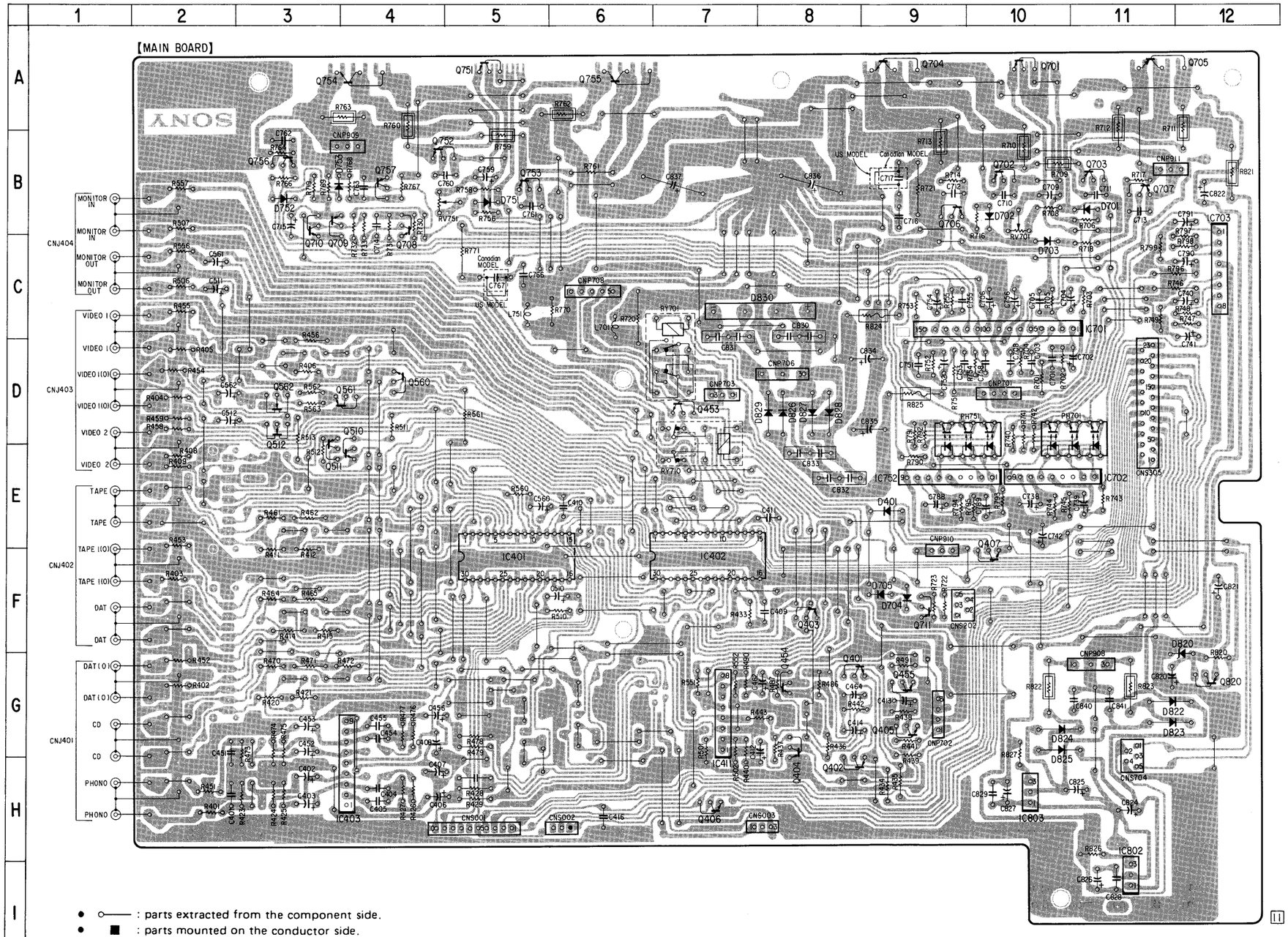
PHONO
CD
DAT (O)
DAT
TAPE1 (O)
TAPE
VIDEO2
VIDEO1 (O)
VIDEO1
ADAPTOR OUT
ADAPTOR IN

REVISED

MAIN BOARD SCHEMATIC DIAGRAM (STR-GX50ES) ・Refer to page 11 for Note on Schematic Diagram.



MAIN BOARD PRINTED WIRING BOARD (STR-GX50ES)

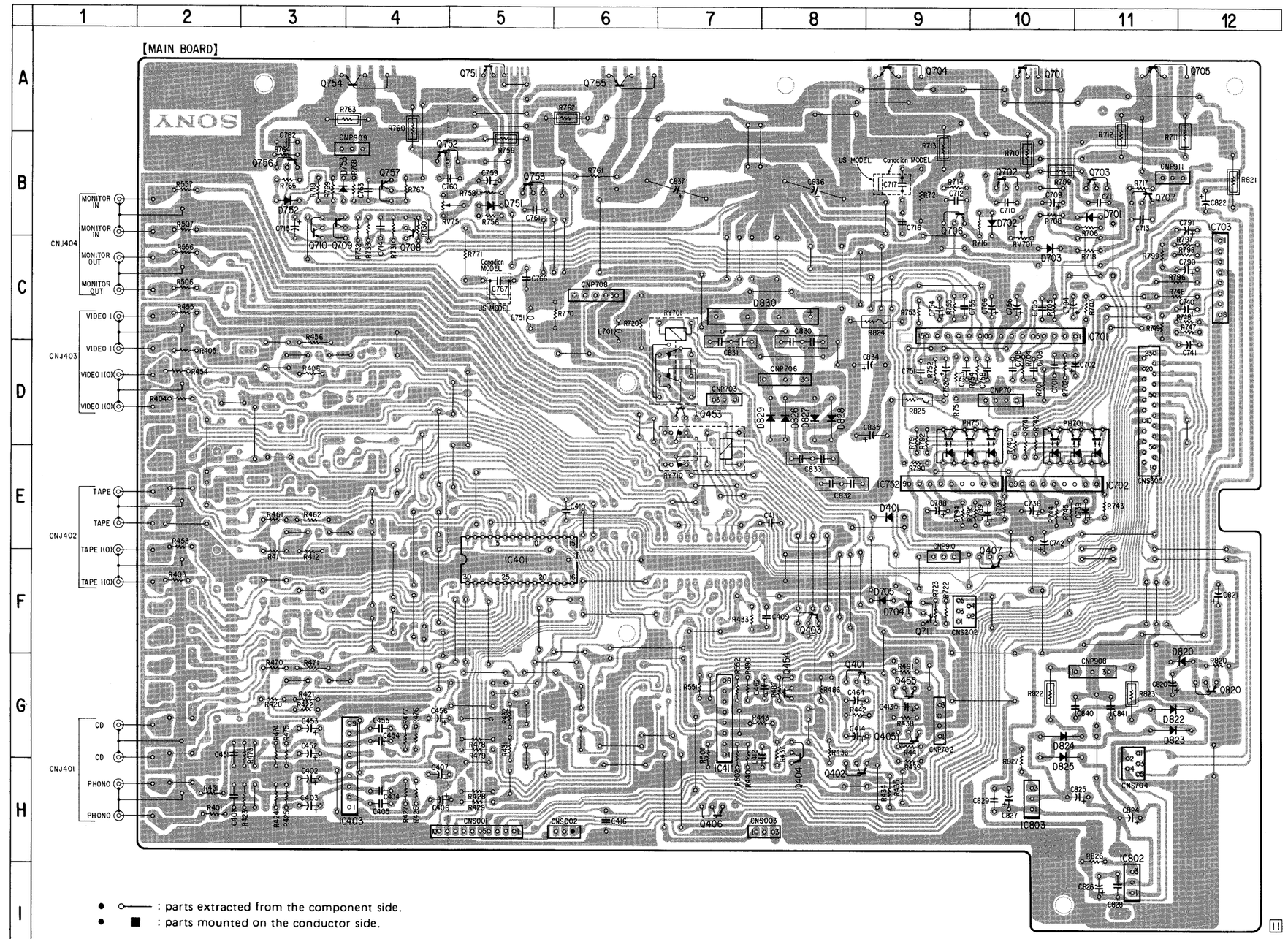


- ○—— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.

Ref. No.	Location	Ref. No.	Location
IC401	F-5	Q710	B-3
IC402	F-7	Q711	F-9
IC403	H-4	Q751	A-5
IC411	G-7	Q752	B-4
IC701	C-10	Q753	B-5
IC702	E-10	Q754	A-4
IC703	C-12	Q755	A-6
IC752	E-9	Q756	B-3
IC802	I-11	Q757	B-4
IC803	H-10	Q820	G-12
Q401	G-8	D401	E-9
Q402	H-8	D701	B-11
Q403	F-8	D702	B-10
Q404	G-8	D703	C-10
Q405	G-9	D704	F-9
Q406	H-7	D705	F-9
Q407	F-10	D751	B-5
Q453	D-7	D752	B-3
Q454	G-8	D753	B-3
Q455	G-9	D820	G-11
Q510	D-4	D822	G-11
Q511	E-3	D823	G-11
Q512	D-3	D824	G-10
Q560	D-4	D825	H-10
Q561	D-3	D826	D-8
Q562	D-3	D827	D-8
Q701	A-10	D828	D-8
Q702	B-10	D829	D-8
Q703	B-11	D830	C-7
Q704	A-9		
Q705	A-11	PH701	D-10
Q706	B-9	PH751	D-9
Q707	B-11		
Q708	B-4		
Q709	B-3		

MAIN BOARD PRINTED WIRING BOARD (STR-GX40ES)

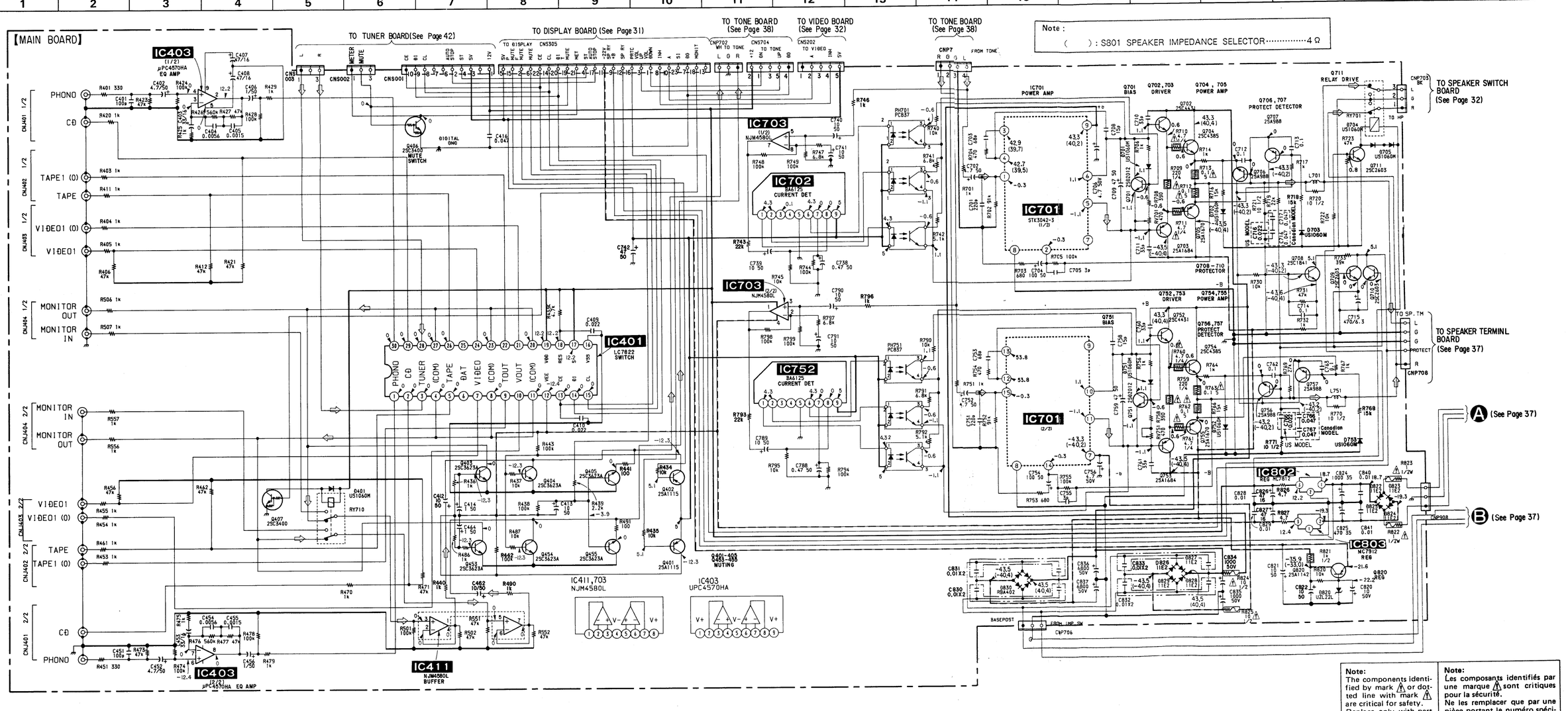
Ref. No.	Location	Ref. No.	Location
IC401	F-5	Q755	A-6
IC403	H-4	Q756	B-3
IC411	G-7	Q757	B-4
IC701	C-10	Q820	G-12
IC702	E-10		
IC703	C-12	D401	E-9
IC752	E-9	D701	B-11
IC802	I-11	D702	B-10
IC803	H-10	D703	C-10
		D704	F-9
Q401	G-8	D705	F-9
Q402	H-8	D751	B-5
Q403	F-8	D752	B-3
Q404	G-8	D753	B-3
Q405	G-9	D820	G-11
Q406	H-7	D822	G-11
Q407	F-10	D823	G-11
Q453	D-7	D824	G-10
Q454	G-8	D825	H-10
Q455	G-9	D826	D-8
Q701	A-10	D827	D-8
Q702	B-10	D828	D-8
Q703	B-11	D829	D-8
Q704	A-9	D830	C-7
Q705	A-11		
Q706	B-9	PH701	D-10
Q707	B-11	PH751	D-9
Q708	B-4		
Q709	B-3		
Q710	B-3		
Q711	F-9		
Q751	A-5		
Q752	B-4		
Q753	B-5		
Q754	A-4		



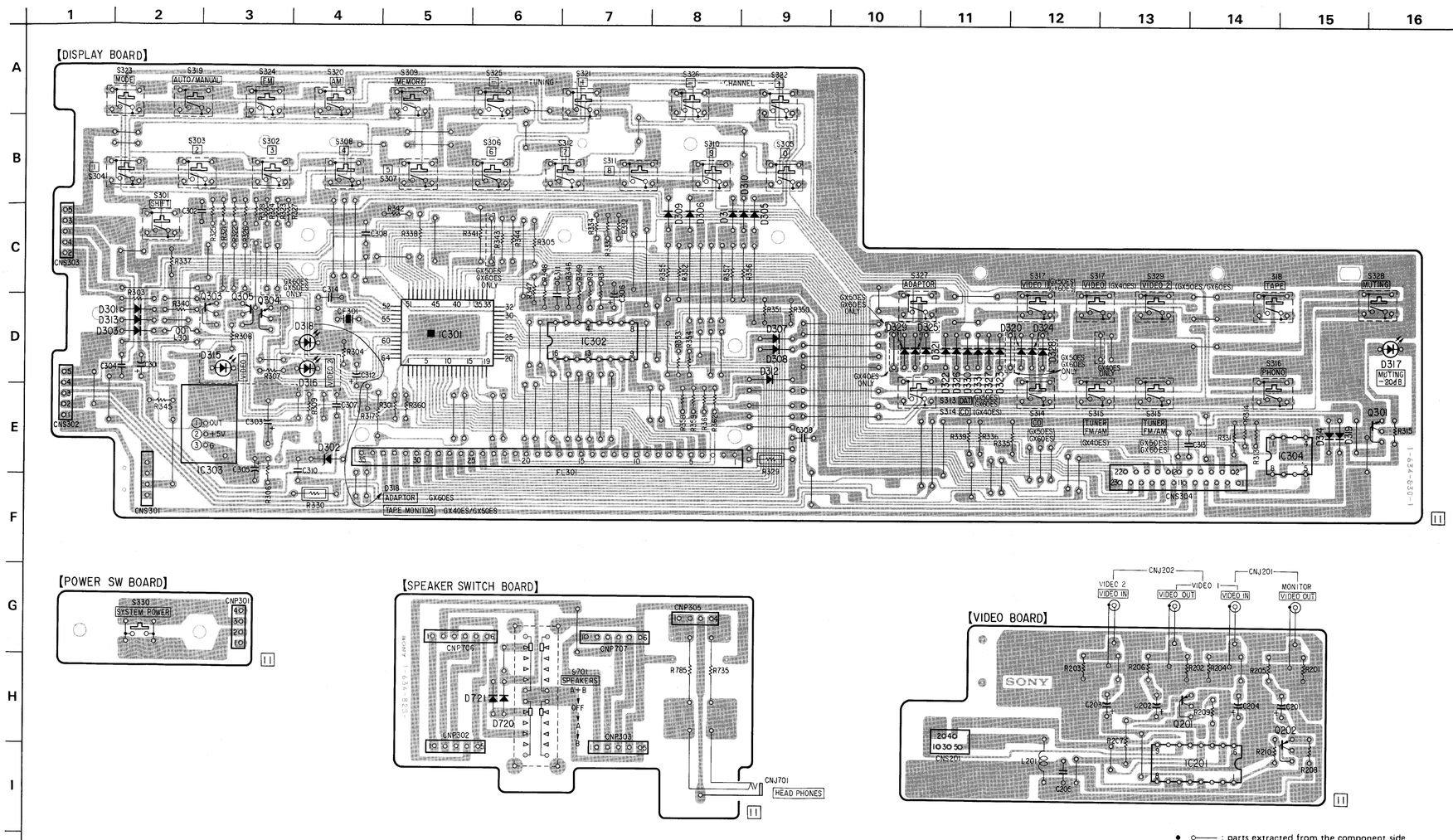
- ○—— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.

REVISED

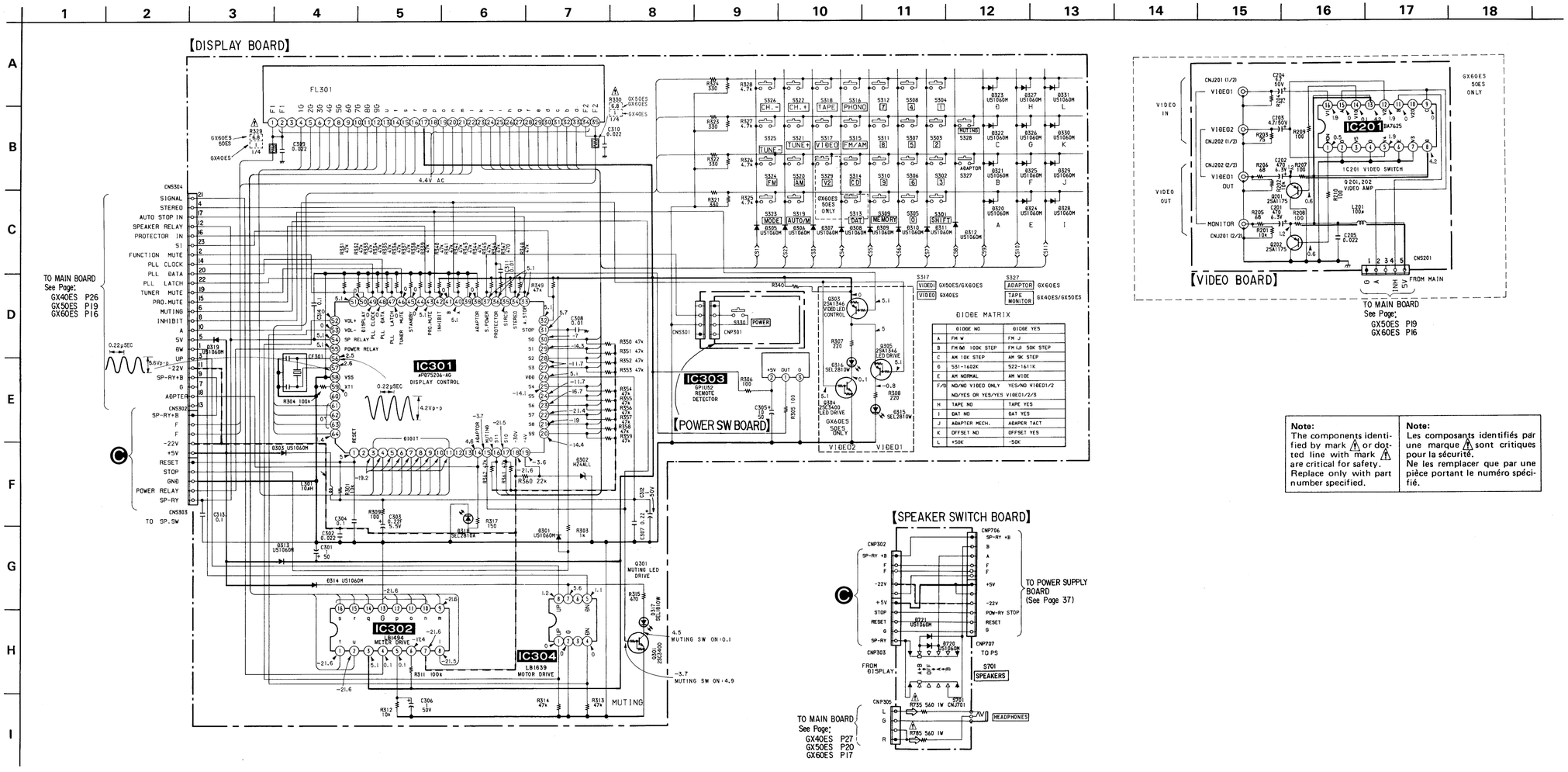
MAIN BOARD SCHEMATIC DIAGRAM (STR-GX40ES) ・Refer to page 11 for Note on Schematic Diagram.


【MAIN BOARD】
TO TUNER BOARD(See Page 42)
TO DISPLAY BOARD (See Page 31)
TO TONE BOARD (See Page 38)
TO VIDEO BOARD (See Page 32)
TO TONE BOARD (See Page 38)
Note :
( ) : S801 SPEAKER IMPEDANCE SELECTOR ..... 4 Ω
IC403
IC401
IC702
IC703
IC752
IC701
IC411
IC411,703 NJM4580L
IC403 UPC4570HA
TO SPEAKER SWITCH BOARD (See Page 32)
TO SPEAKER TERMINL BOARD (See Page 37)
(See Page 37)
(See Page 37)
Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.
Note:
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

DISPLAY, POWER SW, SPEAKER SW, VIDEO BOARD PRINTED WIRING BOARDS



DISPLAY, POWER SW, SPEAKER SW, VIDEO BOARD SCHEMATIC DIAGRAMS • Refer to page 11 for Note on Schematic Diagram.



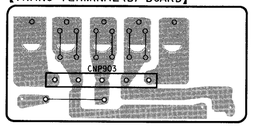
	DIODE NO	DIODE YES
A	FM W	FM J
B	FM 0W0 100K STEP	FM L0 50K STEP
C	AM 10K STEP	AM 9K STEP
D	531-1602K	522-1611K
E	AM NORMAL	AM WIDE
F/G	NO/NO VIDEO ONLY	YES/NO VIDEO1/2
	NO/YES OR YES/YES	VIDEO1/2/S
H	TAPE NO	TAPE YES
I	DAT NO	DAT YES
J	ADAPTER MECH.	ADAPTER TACT
K	OFFSET NO	OFFSET YES
L	+50K	-50K

Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

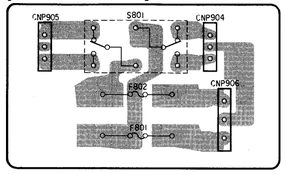
Note:
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

TRANS TERMINAL (B), TRANS TERMINAL (A), IMP SELECTION, CONNECT (B), POWER SUPPLY, SPEAKER TERMINAL, TONE, CONNECT (A), MOTOR, VOL LED BOARD PRINTED WIRING BOARDS

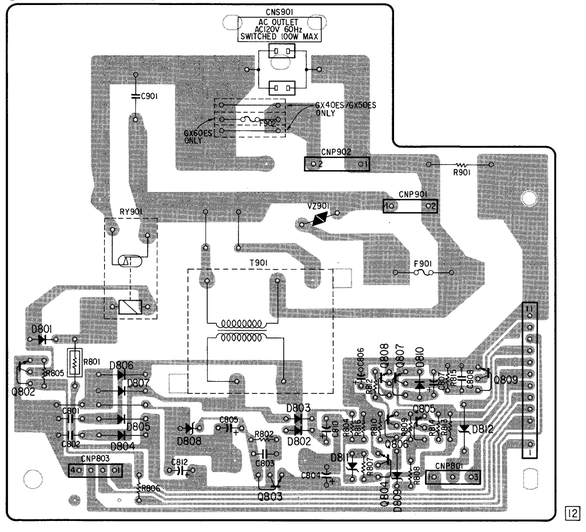
【TRANS TERMINAL(B) BOARD】



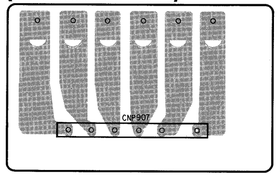
【INP SELECTION BOARD】



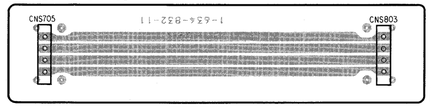
【POWER SUPPLY BOARD】

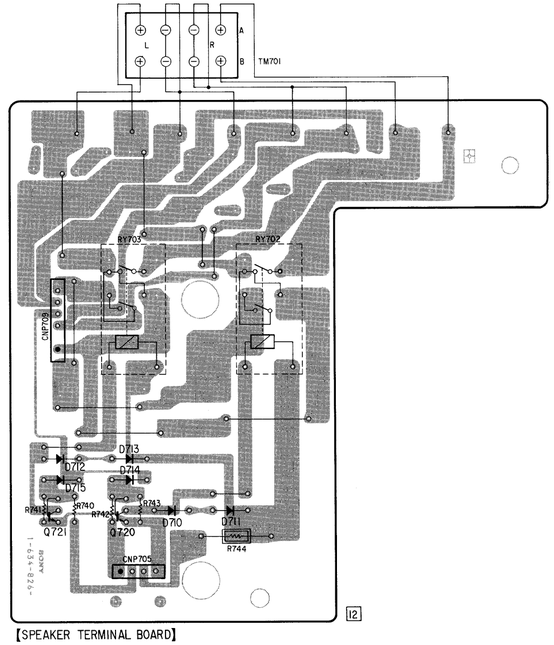


【TRANS TERMINAL(A) BOARD】



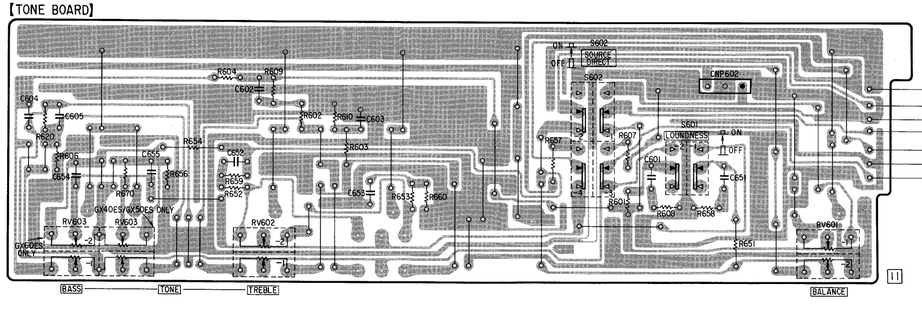
【CONNECT(B) BOARD】



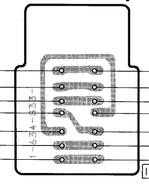


【SPEAKER TERMINAL BOARD】

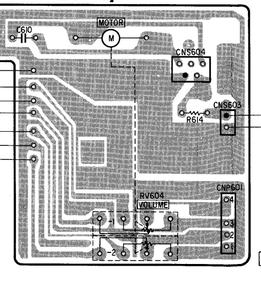
【TONE BOARD】



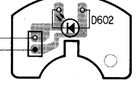
【CONNECT(A) BOARD】



【MOTOR VOL BOARD】



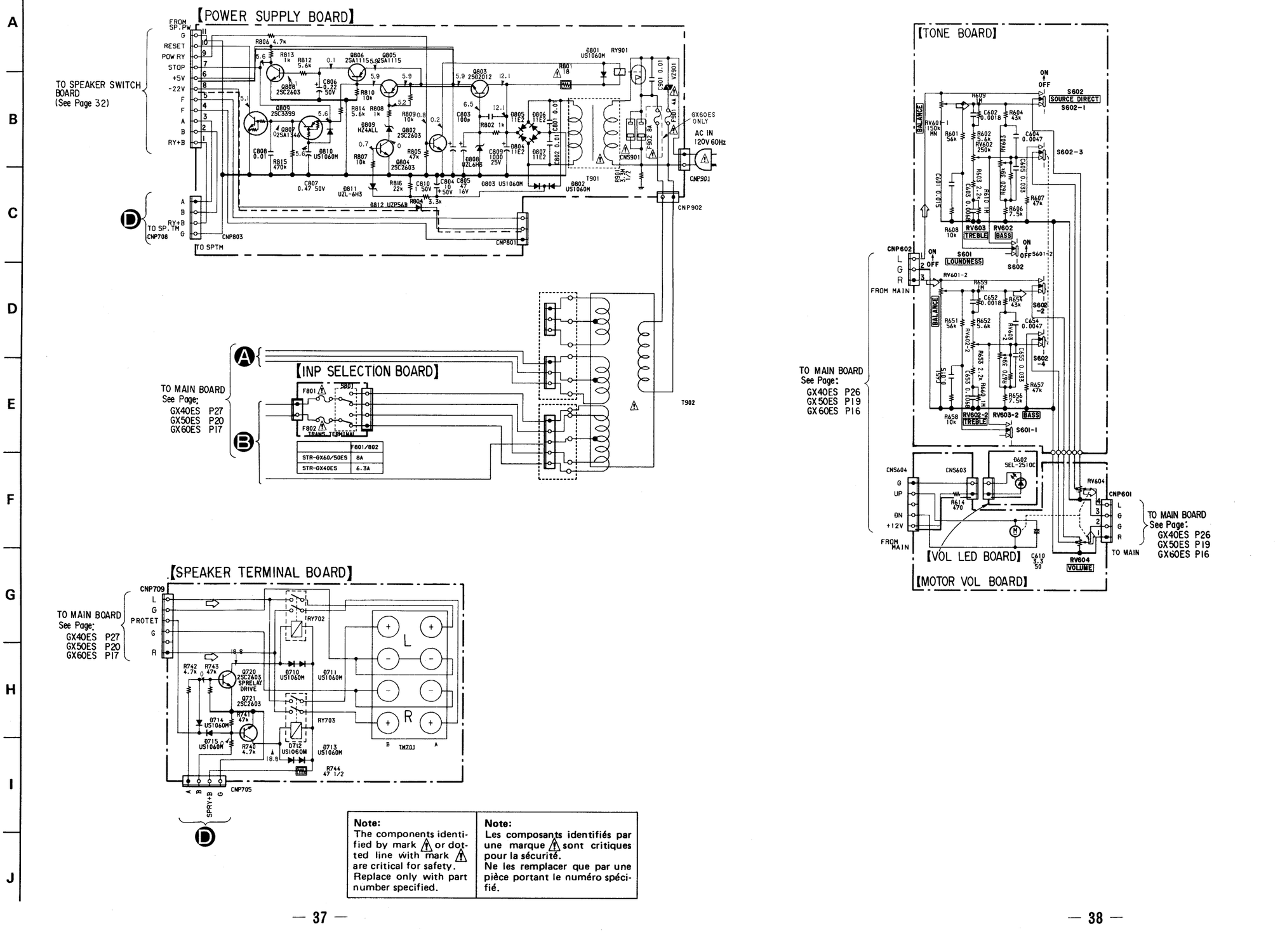
【VOL LED BOARD】



- ○—— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.

TRANS TERMINAL (B), TRANS TERMINAL (A), IMP SELECTION, CONNECT (B), POWER SUPPLY, SPEAKER TERMINAL, TONE, CONNECT (A), MOTOR, VOL LED BOARD SCHEMATIC DIAGRAMS

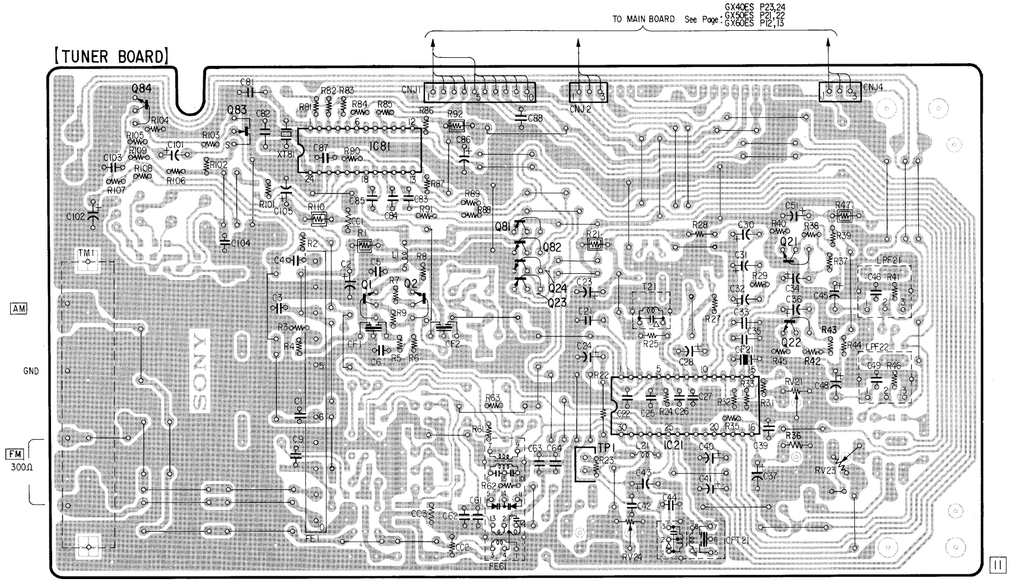
• Refer to page 11 for Note on Schematic Diagram.



Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

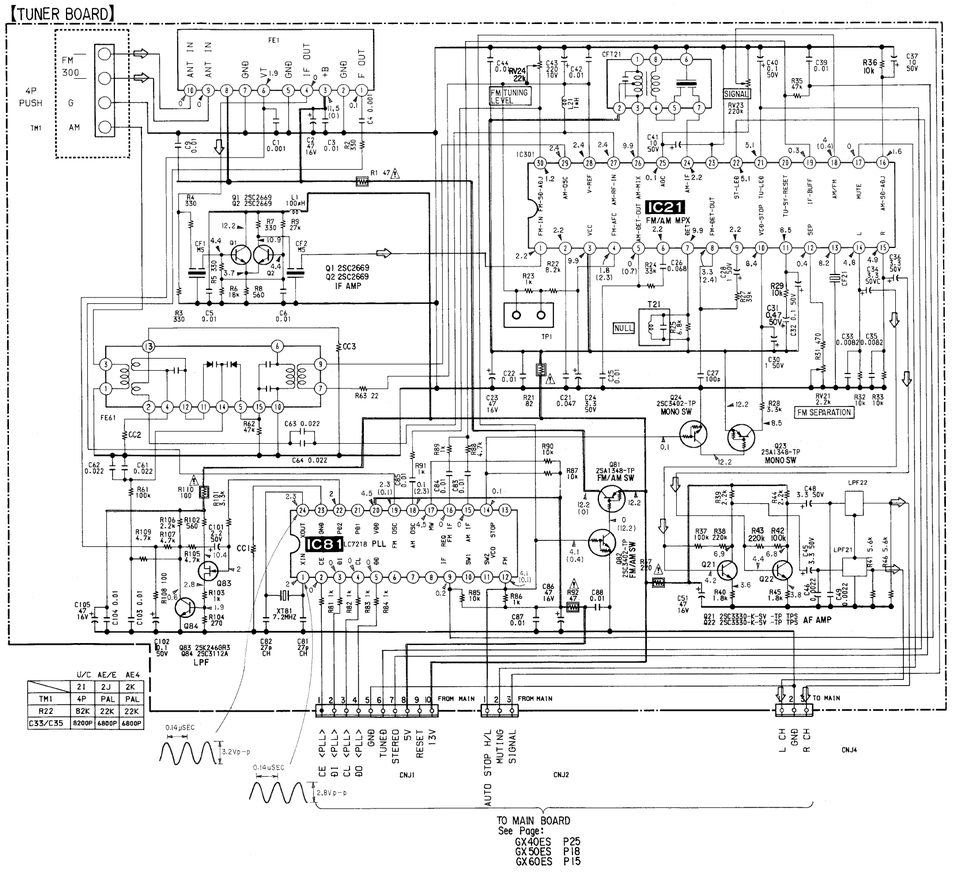
Note:
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

TUNER BOARD PRINTED WIRING BOARD



• ○—— : parts extracted from the component side.
• ■ : parts mounted on the conductor side.

TUNER BOARD SCHEMATIC DIAGRAM ・Refer to page 11 for Note on Schematic Diagram.



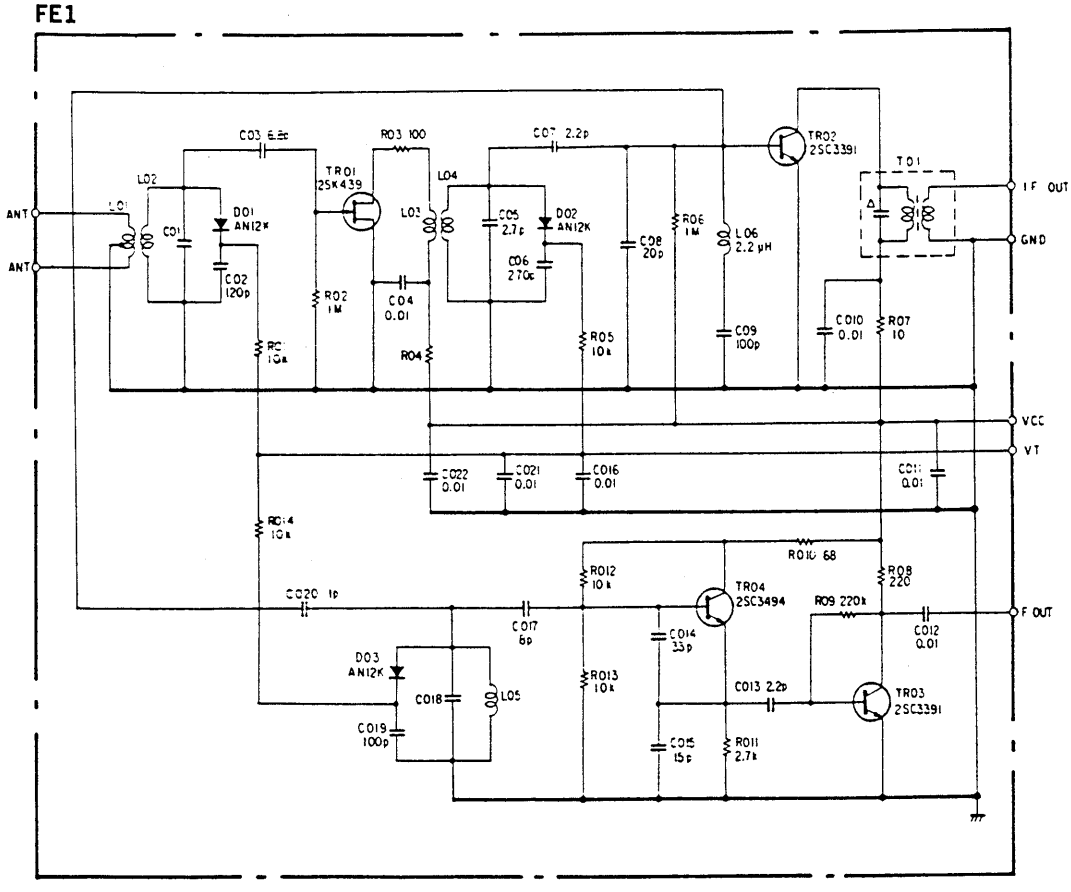
	U/C	AE/E	AE4
	21	2J	2K
TM1	4P	PAL	PAL
R22	82K	22K	22K
C33/C35	8200P	6800P	6800P

Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Note:
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

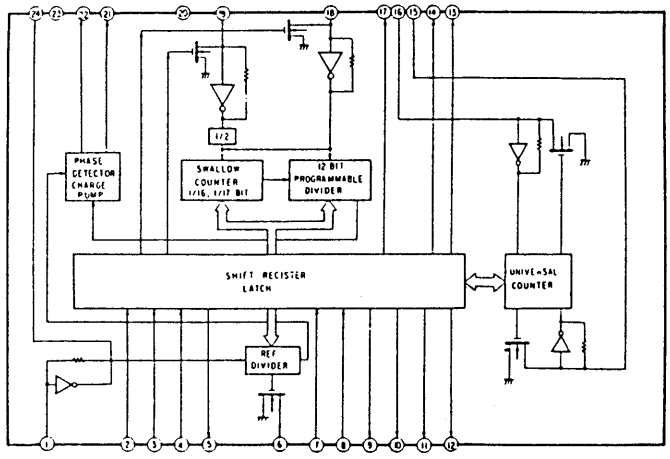
• **FE1 (Front End) Schematic diagram**

FE1

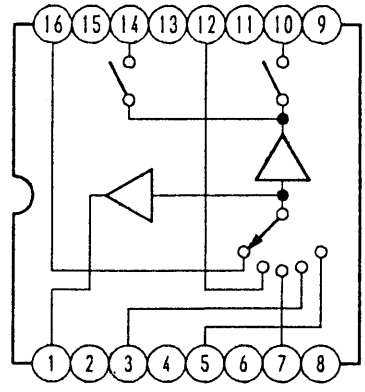


• IC Block Diagrams

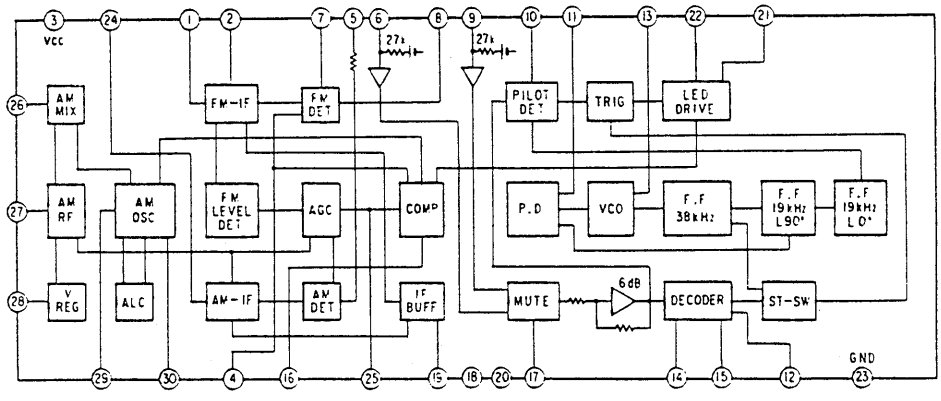
IC81 LC7218



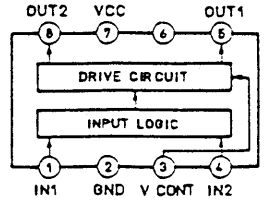
IC201 BA7625



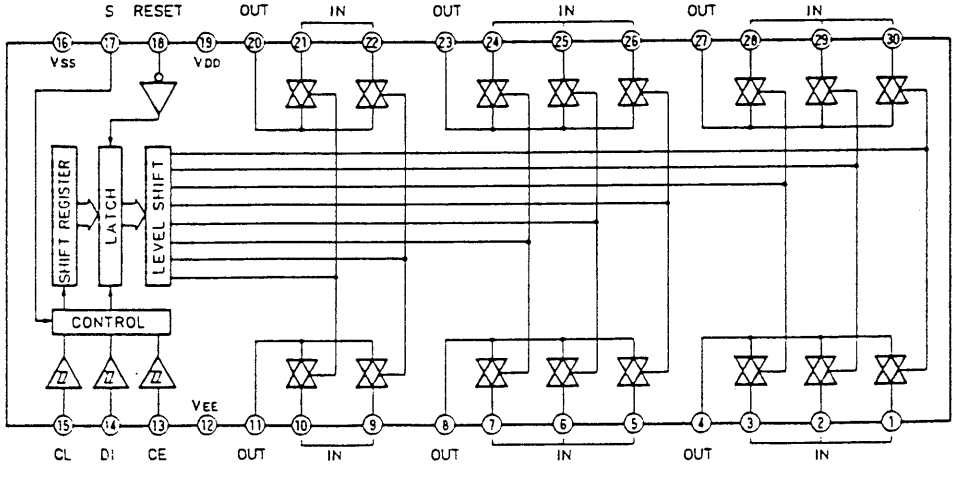
IC301 LA1851N



IC304 LB1639



IC401, IC402 LC7822



3-4. EXPLANATION OF IC301 (μPD75206)

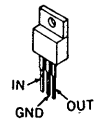
PIN No.	SIGNAL NAME	FUNCTION	I/O	ACTIVE
1	RESET	Micro Computer RESET	I	L
2	T0	FL tube indication (invalid) digit	O	H
3	T1	FL tube indication digit T1	O	H
4	T2	FL tube indication digit T2	O	H
5	T3	FL tube indication digit T3	O	H
6	T4	FL tube indication digit T4	O	H
7	T5	FL tube indication digit T5	O	H
8	T6	FL tube indication digit T6	O	H
9	T7	FL tube indication digit T7	O	H
10	T8	FL tube indication digit T8	O	H
11	T9	FL tube SIGNAL indication digit T9	O	H
12	T10/PH3	DBFB Output	O	H
13	T11/PH2	IF WIDE/NARROW Output	O	H
14	T12/PH1	Adapter Output	O	H
15	T13/PH0	−20dB Muting Output	O	H
16	T14/S11	FL tube indication Segment/Diode S11	O	H
17	T15/S10	FL tube indication Segment/Diode S10	O	H
18	V road	FL tube pulldown power supply	−	−
19	V pre	FL tube driver power supply	−	−
20	S9	FL tube indication Segment/Diode S9	O	H
21	S8	FL tube indication Segment/Key Scan S8	O	H
22	S7	FL tube indication Segment/Key Scan S7	O	H
23	S6	FL tube indication Segment/Key Scan S6	O	H
24	S5	FL tube indication Segment/Key Scan S5	O	H
25	S4	FL tube indication Segment/Key Scan S4	O	H
26	Vdd	Micro Computer power supply	−	−
27	S3	FL tube indication Segment/Key Scan S3	O	H
28	S2	FL tube indication Segment/Key Scan S2	O	H
29	S1	FL tube indication Segment/Key Scan S1	O	H
30	S0	FL tube indication Segment/Key Scan S0	O	H
31	P00/INT4	Signal to cut power supply STOP	I	L
32	P01/SCK	Serial latch for electrical adjustment use Sl. LAT	I	L

−Continued on page 46−

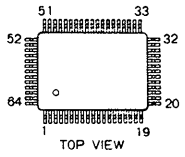
PIN No.	SIGNAL NAME	FUNCTION		I/O	ACTIVE
33	P02/S0	Tuner Auto Stop input	ASTP	I	L
34	P03/S1	Tuner Stereo input	STEREO	I	L
35	P10/INT0	Remote Control Signal input	SIRCS	I	L
36	P11/INT1	Protector input	PROTECT	I	L
37	P12/INT2	System Power Key input	PKEY	I	L
38	P13/TI0	Adapter Mechanical Switch input	AKEY	I	H
39	P20	Surround output	SURROUND	O	H
40	P21	Video Control A	VCRA	O	H
41	P22	Video Control B	VCRB	O	H
42	P23/BUZ	Video Inhibit	VCRI	O	H
43	P30	Protector Muting	PMUT	O	L
44	P31	Source Direct Output		O	H
45	P32	Standby LED Output	STANBY	O	H
46	P33	Tuner Muting	TMUTE	O	H
47	P60	PLL/7822 Latch	PLAT	O	H
48	P61	PLL/7822/SI Data	DATA	I/O	H
49	P62	PLL/7822/SI Clock	CLOK	I/O	H
50	P63	IF WIDE/NARROW Display output		O	H
51	P40	Function Muting	FMUTE	O	L
52	P41	Motor Volume UP	VOL+	O	H
53	P42	Motor Volume DOWN	VOL−	O	H
54	P43	Speaker Relay	SP. RY	O	H
55	PP0	Power Relay	POW. RY	O	H
56	X1	Ceramic Oscillator		−	−
57	X2	Ceramic Oscillator		−	−
58	Vss	Micro Computer GND		−	−
59	XT1	−		−	−
60	XT2	−		−	−
61	P50	P50	Key Scan Input	I	H
62	P51	P51	Key Scan Input	I	H
63	P52	P52	Key Scan Input	I	H
64	P53	P53	Key Scan Input	I	H

3-5. SEMICONDUCTOR LEAD LAYOUTS

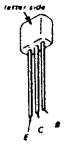
LM78M12
M5F78M12



μPD75206G-557-1B

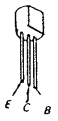


2SA1175-HFE
2SC2785-HFE

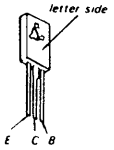


DTA114ES
DTA124ES
DTC114ES
DTC124ES
DTC144ES
2SC2669

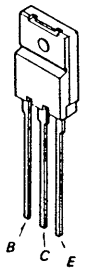
2SA988-F
2SA1841-PAFAEA
2SC2603-FE
2SC3623-L



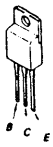
2SA1142-QPE



2SD2012

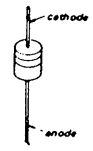


2SA1684-LK
2SC4431-LK

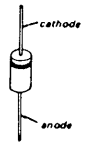


2SK246GR3

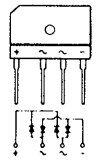
HZS22-2L
HZS6C3L
1SS120
11ES2



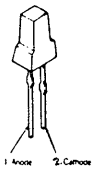
HZ4ALL



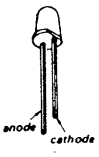
RBV-602-01



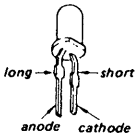
SEL1810W-C



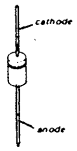
SEL2510W



SEL2810A-C



UZP-5.6B



SECTION 4
EXPLODED VIEWS

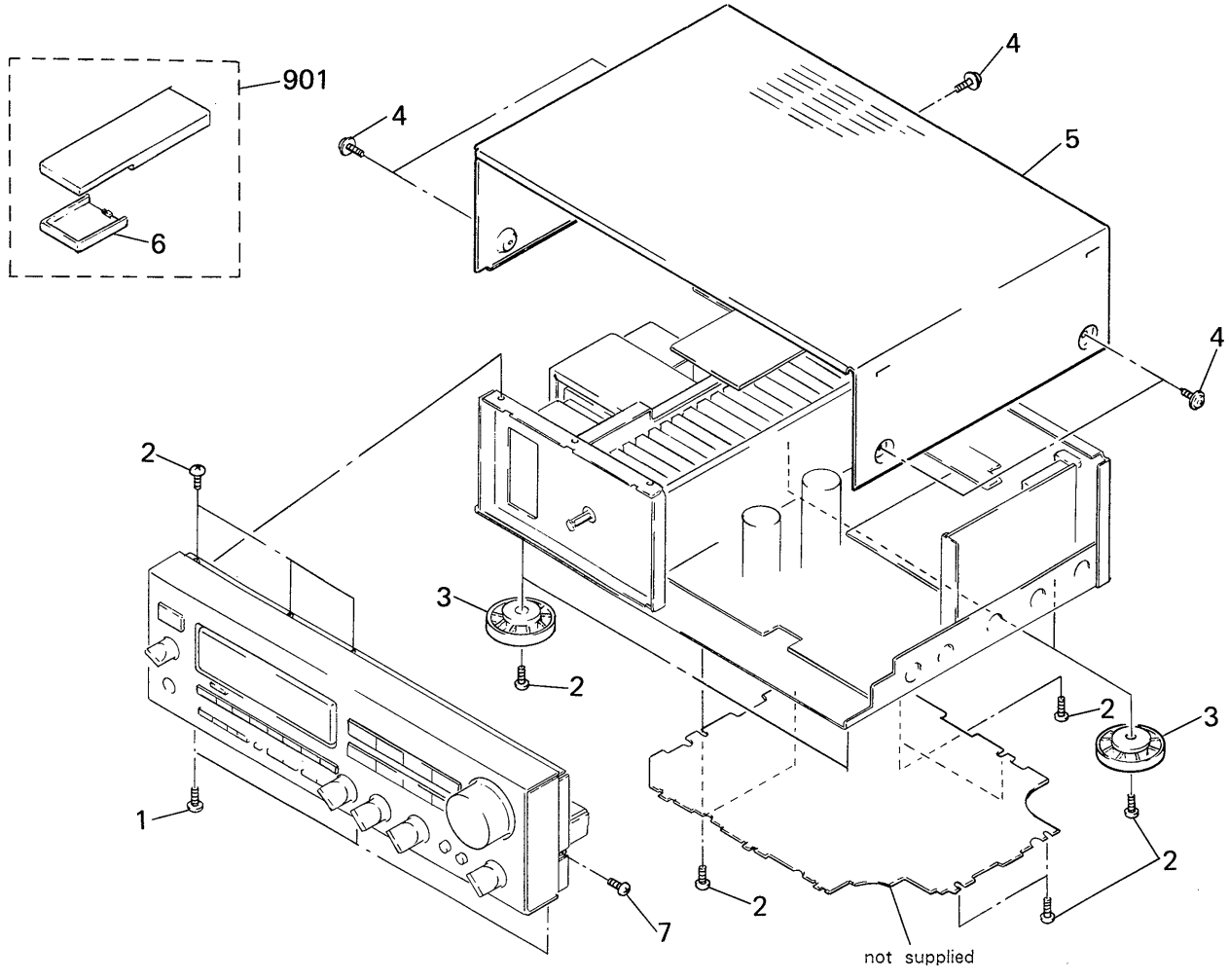
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
  Example:
  (RED) . . . KNOB, BALANCE (WHITE)
  ↑ ↑
  Cabinet's Color Parts' Color

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

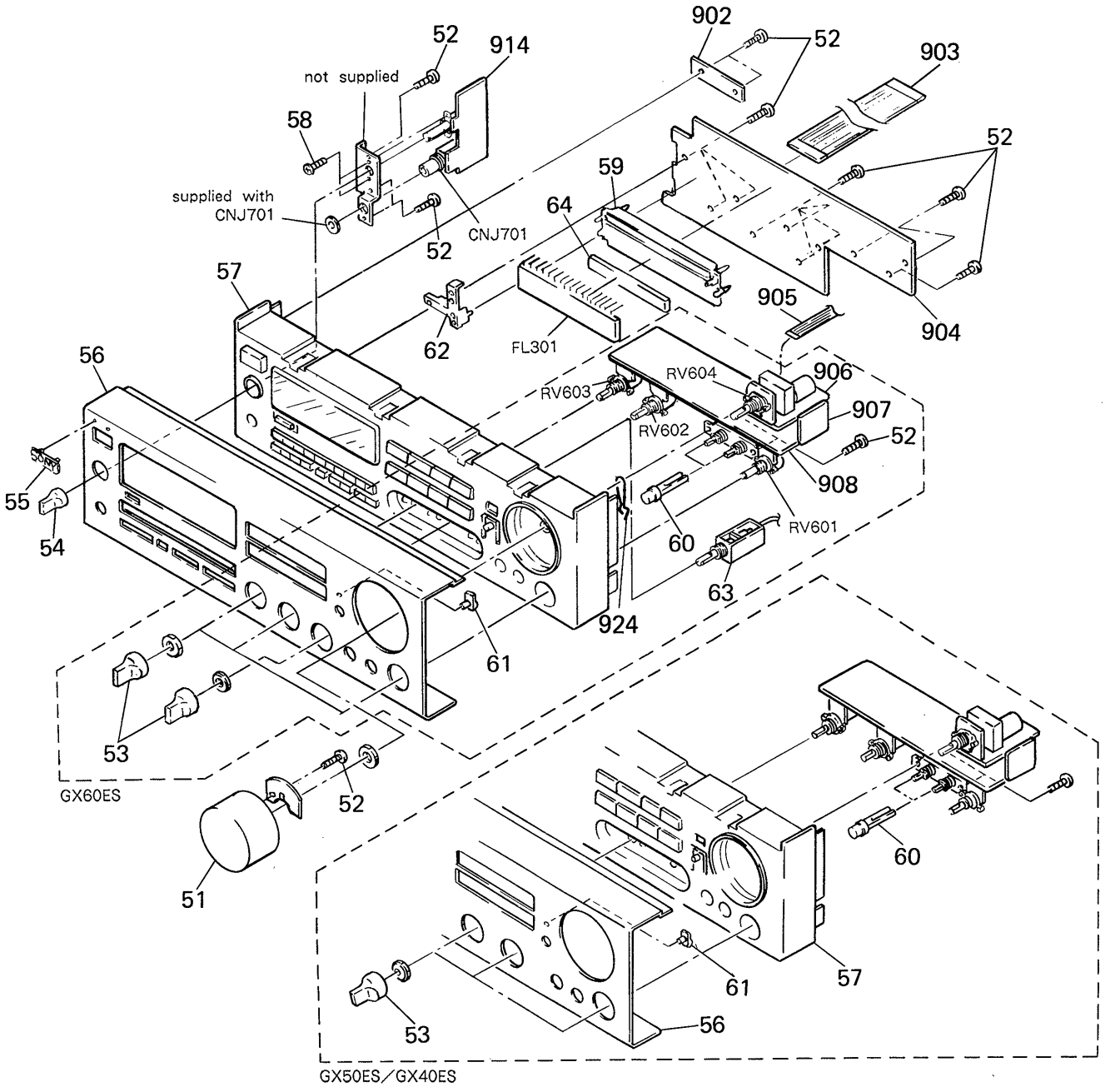
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifé.

1. FRONT PANEL SECTION-1



No.	Part No.	Description	Remarks
1	3-703-685-21	SCREW (+BV 3X8)	
2	7-682-561-04	SCREW +BVTT 4X8 (S)	
3	X-3304-938-2	FOOT ASSY	
4	3-704-366-01	SCREW (CASE) (M3X8)	
5	4-924-920-71	CASE	
6	2-181-754-01	(GX40ES).....COVER, BATTERY	
	4-925-079-01	(GX50ES,GX60ES)...COVER (6), BATTERY	
7	7-685-646-79	SCREW +BTP 3×8 TYPE2 N-S	
901	1-465-419-11	(GX60ES)...REMOTE COMMANDER (RM-P303)	
	1-465-420-11	(GX50ES)...REMOTE COMMANDER (RM-U203)	
	1-465-423-11	(GX40ES)...REMOTE COMMANDER (RM-S103)	

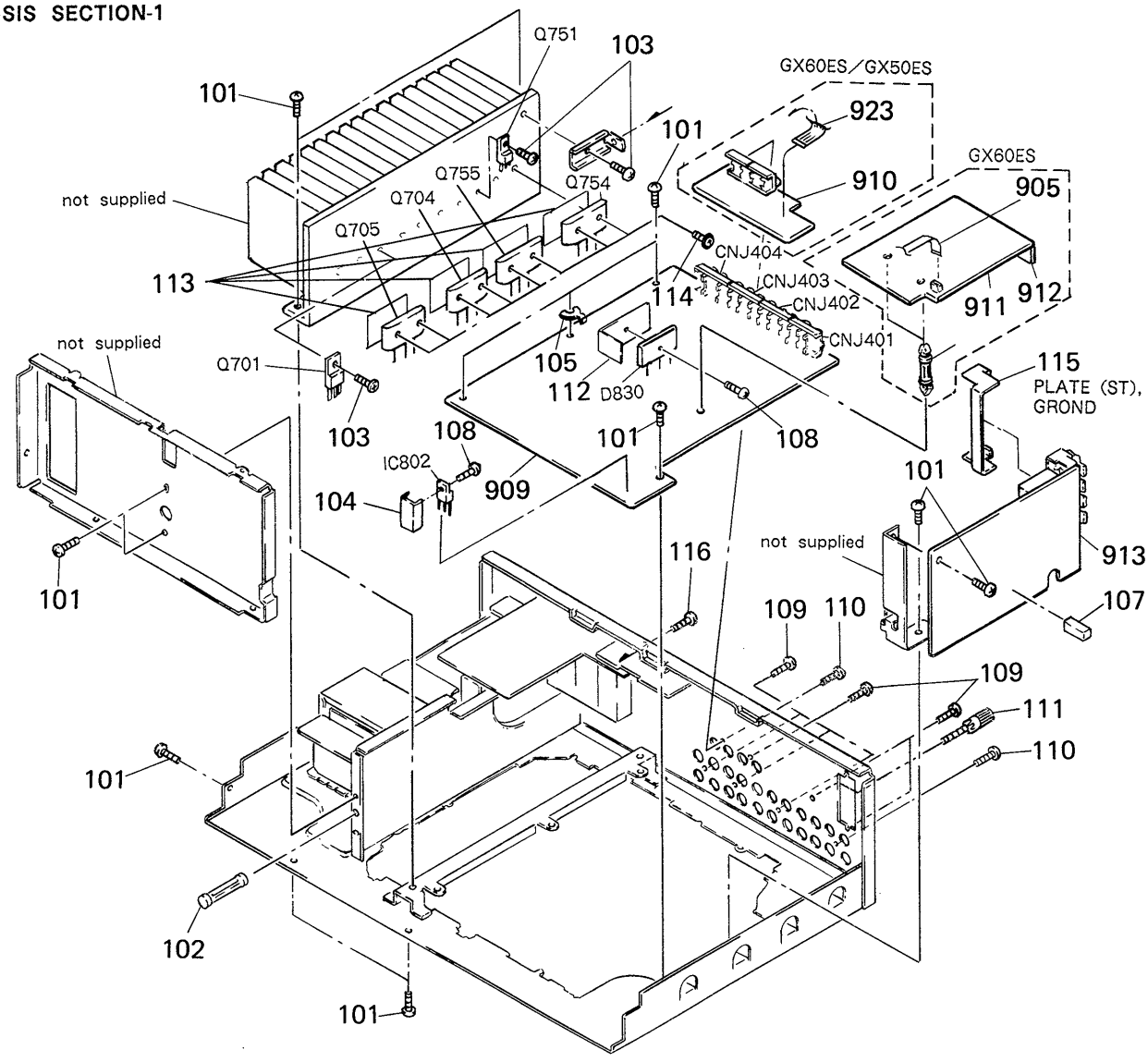
2. FRONT PANEL SECTION-2



No.	Part No.	Description	Remarks
51	X-4906-828-1	KNOB (47) ASSY	
52	4-928-635-01	SCREW, +BV (2.6X8) TAPPING	
53	4-916-745-01	KNOB (DIA.21)	
54	4-908-097-21	KNOB	
55	4-908-848-01	EMBLEM, SONY	
56	4-931-619-01	(GX60ES)...PANEL, FRONT	
	4-931-619-11	(GX50ES)...PANEL, FRONT	
	4-931-619-21	(GX40ES)...PANEL, FRONT	
57	X-4924-918-1	(GX60ES)...PANEL (BASE) ASSY	
	X-4924-919-A	(GX50ES)...PANEL (BASE) ASSY	
	X-4924-920-A	(GX40ES)...PANEL (BASE) ASSY	
58	7-682-548-04	SCREW +BVTT 3X8 (S)	
59	*4-923-103-01	HOLDER, FL TUBE	
60	4-931-926-01	BUTTON (B)	
61	3-684-018-01	COVER, LAMP, REC	
62	4-931-631-01	HOLDER, LED	
63	1-572-318-11	SWITCH, ROTARY SLIDE (REMOTE)	
64	*4-921-941-41	CUSHION (FL)	

No.	Part No.	Description	Remarks
902	*1-634-828-11	PC BOARD, P.SW	
903	1-575-664-11	WIRE, FLAT TYPE (23 CORE)	
904	*A-4334-521-A	(GX50ES,GX60ES)...MOUNTED PCB, DISPLAY	
	*A-4334-522-A	(GX40ES).....MOUNTED PCB, DISPLAY	
905	1-575-662-11	WIRE, FLAT TYPE (5 CORE)	
906	*1-634-831-11	PC BOARD, MOTOR VOL	
907	*1-634-832-11	PC BOARD, CONNECT (A)	
908	*1-634-834-11	PC BOARD, TONE	
914	*1-634-825-12	PC BOARD, SP SW	
924	*1-535-624-11	TERMINAL, PIN JACK	
CNJ701	1-569-348-11	JACK, LARGE TYPE(HEADPHONES)	
FL301	1-519-590-11	INDICATOR TUBE, FLUORESCENT	
RV601	1-238-152-31	RES, VAR, CARBON 150K/150K (BALANCE)	
RV602	1-237-471-41	RES, VAR, CARBOM 250K/250K(TONE TREBLE)	
RV603	1-238-441-21	RES, VAR, CARBON 25K/500K (TONE BASS)	
RV604	1-238-628-21	RES, VAR, CARBON (MOTOR) 120KX2 (ATTENUATOR)	

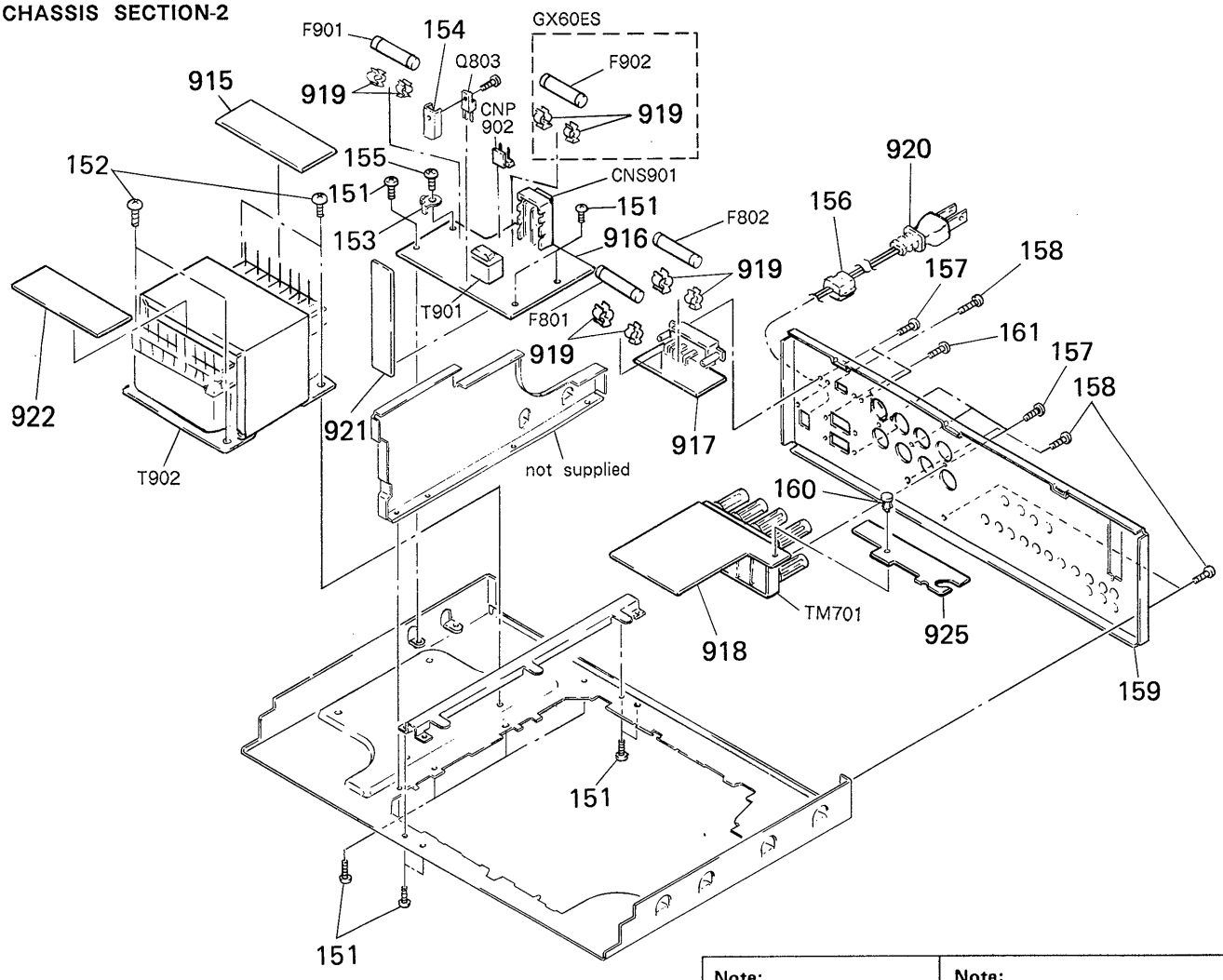
3. CHASSIS SECTION-1



No.	Part No.	Description	Remarks
101	7-682-561-04	SCREW +BVTT 4X8 (S)	
102	*3-687-542-11	SPACER, PC BOARD SPACE	
103	7-682-548-01	SCREW +B 3X8	
104	*3-309-144-21	HEAT SINK	
105	*4-904-446-01	PLATE, GROUND	
106	*3-682-419-21	(GX60ES)...HOLDER, P.C.B	
107	4-931-632-01	CUSHION	
108	7-682-548-04	SCREW +BVTT 3X8 (S)	
109	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
110	7-621-849-00	SCREW, TAPPING	
111	3-706-165-00	SCREW	
112	*4-931-903-01	HEAT SINK (DI)	
113	4-885-901-31	SHEET, RADIATION	
114	7-682-950-01	SCREW +PSW 3X12	
115	*4-924-988-11	PLATE (ST), GROND	
116	3-704-366-01	SCREW, (CASE) (M3×8)	
905	1-575-662-11	WIRE, FLAT TYPE (5 CORE)	
909	*A-4334-507-A	(GX60ES:US).....MOUNTED PCB, MAIN	
	*A-4334-508-A	(GX60ES:Canadian)...MOUNTED PCB, MAIN	
	*A-4334-509-A	(GX50ES:US).....MOUNTED PCB, MAIN	
	*A-4334-510-A	(GX50ES:Canadian)...MOUNTED PCB, MAIN	
	*A-4334-511-A	(GX40ES:US).....MOUNTED PCB, MAIN	
	*A-4334-512-A	(GX40ES:Canadian)...MOUNTED PCB, MAIN	

No.	Part No.	Description	Remarks
910	*1-634-829-11	(GX50ES,GX60ES)...PC BOARD, VIDEO	
911	*1-634-827-12	(GX60ES)...PC BOARD, REC OUT	
912	*1-634-916-11	(GX60ES)...PC BOARD, REC OUT CONNECTOR	
913	*A-4303-259-A	MOUNTED PCB, TUNER	
923	1-575-663-11	WIRE, FLAT TYPE (5 CORE)	
926	1-575-662-11	WIRE, FLAT TYPE (5 CORE)	
CNJ401	1-565-258-11	(GX40ES)...JACK, PIN 4P (PHONO CD)	
CNJ401	1-565-320-11	(GX50ES,GX60ES)...JACK, PIN 6P (PHONO CD DAT)	
CNJ402	1-565-258-11	(GX40ES)...JACK, PIN 4P (TAPE)	
CNJ402	1-565-320-11	(GX50ES,GX60ES)...JACK, PIN 6P (DAT TAPE)	
CNJ403	1-565-258-11	(GX40ES)...JACK, PIN 4P (VIDEO)	
CNJ403	1-565-320-11	(GX50ES,GX60ES)...JACK, PIN 6P (VIDEO 1/2)	
D830	8-719-302-38	DIODE RBV-602-01	
IC802	8-759-501-47	IC LM78M12	
CNJ404	1-565-258-11	(GX40ES)...JACK, PIN 4P (TAPE MONITOR)	
Q701	8-729-209-15	TRANSISTOR 2SD2012	
Q704	8-729-320-96	TRANSISTOR 2SC2921-OPY	
Q705	8-729-320-73	TRANSISTOR 2SA1215-OY	
Q751	8-729-209-15	TRANSISTOR 2SD2012	
Q754	8-729-320-96	TRANSISTOR 2SC2921-OPY	
Q755	8-729-320-73	TRANSISTOR 2SA1215-OY	

4. CHASSIS SECTION-2



Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

No.	Part No.	Description	Remarks
151	7-682-548-04	SCREW +BVTT 3X8 (S)	
152	7-682-561-04	SCREW +BVTT 4×8 (S)	
153	*3-346-266-12	PLATE, GROUND	
154	*3-309-144-21	HEAT SINK	
155	7-682-547-09	SCREW +BVTT 3X6 (S)	
156	*3-703-244-00	BUSHING (2104), CORD	
157	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
158	7-682-547-09	SCREW +BVTT 3X6 (S)	
159	*4-931-608-01	(GX60ES:US).....PANEL, BACK	
	*4-931-608-11	(GX60ES:Canadian)...PANEL, BACK	
	*4-931-608-21	(GX50ES:US).....PANEL, BACK	
	*4-931-608-31	(GX50ES:Canadian)...PANEL, BACK	
	*4-931-608-41	(GX40ES:US).....PANEL, BACK	
	*4-931-608-51	(GX40ES:Canadian)...PANEL, BACK	
	7-685-646-79	SCREW +BTP 3X8 TYPE2 N-S	
160	4-812-134-00	RIVET NYLON, 3.5	
161	7-685-646-79	SCREW +BTP 3×8 TYPE2 N-S	
915	*1-634-838-11	PC BOARD, TRANS TERMINAL (B)	
916	*A-4334-531-A	(GX60ES)...MOUNTED PCB, POWER SUPPLY	
	*A-4334-532-A	(GX40ES)...MOUNTED PCB, POWER SUPPLY	
	*A-4334-904-A	(GX50ES)...MOUNTED PCB, POWER SUPPLY	
917	*1-634-839-11	PC BOARD, IMP SELECTION	
918	*1-634-826-11	PC BOARD, SPEAKER TERMINAL	
919	1-533-225-11	HOLDER, FUSE	

No.	Part No.	Description	Remarks
920	⚠1-575-105-11	CORD, POWER	
921	*1-634-833-11	PC BOARD, CONNECT (B)	
922	*1-634-835-11	PC BOARD, TRANS TERMINAL (A)	
925	*1-634-917-11	PC BOARD, WIRE CLAMP	
CNP902	*1-535-139-00	BASE POST 19MM (10MM PITCH) 2P	
CNS901	1-540-059-11	OUTLET, AC (POLAR)	
F801	⚠1-532-748-11	(GX40ES).....FUSE, GLASS TUBE (6.3A)	
F801	⚠1-532-749-11	(GX50ES,GX60ES)...FUSE, GLASS TUBE (8A)	
F802	⚠1-532-748-11	(GX40ES).....FUSE, GLASS TUBE (6.3A)	
F802	⚠1-532-749-11	(GX50ES,GX60ES)...FUSE, GLASS TUBE (8A)	
F901	⚠1-532-598-00	FUSE, GLASS TUBE (4A)	
F902	⚠1-532-749-11	(GX60ES)...FUSE, GLASS TUBE (8A)	
Q803	8-729-209-15	TRANSISTOR 2SD2012	
T901	⚠1-448-517-21	TRANSFORMER, POWER	
T902	⚠1-449-970-11	(GX40ES)...TRANSFORMER, POWER	
T902	⚠1-449-972-11	(GX60ES)...TRANSFORMER, POWER	
T902	⚠1-449-973-11	(GX50ES)...TRANSFORMER, POWER	
TM701	1-537-235-11	TERMINAL BOARD (SP)	

SECTION 5
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC, UPD...: μPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

WG : West Germany

• TUNER BOARD

Ref.No.	Part No.	Description			
C1	1-162-522-11	CERAMIC CHIP	0.001MF	20%	25V
C2	1-124-477-11	ELECT	47MF	20%	16V
C3	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C4	1-162-522-11	CERAMIC CHIP	0.001MF	20%	25V
C5	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C6	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C9	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C10	1-162-516-11	CERAMIC CHIP	100PF	10%	50V
C21	1-161-021-11	CERAMIC	0.047MF	10%	25V
C22	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C23	1-124-477-11	ELECT	47MF	20%	16V
C24	1-123-382-00	ELECT	3.3MF	20%	50V
C25	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C26	1-162-527-11	CERAMIC CHIP	0.0068MF	20%	12V
C27	1-162-516-11	CERAMIC CHIP	100PF	10%	50V
C28	1-124-499-11	ELECT	1.0MF	20%	50V
C30	1-124-499-11	ELECT	1.0MF	20%	50V
C31	1-124-902-00	ELECT	0.47MF	20%	50V
C32	1-124-463-00	ELECT	0.1MF	20%	50V
C33	1-130-482-00	MYLAR	0.0082MF	5%	50V
C34	1-123-382-00	ELECT	3.3MF	20%	50V
C35	1-130-482-00	MYLAR	0.0082MF	5%	50V
C36	1-123-382-00	ELECT	3.3MF	20%	50V
C37	1-123-875-11	ELECT	10MF	20%	50V
C39	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C40	1-124-463-00	ELECT	0.1MF	20%	50V
C41	1-234-972-11	ELECT	4.7MF	20%	50V
C42	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C43	1-126-176-11	ELECT	220MF	20%	10V
C44	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C45	1-123-382-00	ELECT	3.3MF	20%	50V
C46	1-162-524-11	CERAMIC CHIP	0.0022MF	20%	25V
C48	1-123-382-00	ELECT	3.3MF	20%	50V
C49	1-162-524-11	CERAMIC CHIP	0.0022MF	20%	25V
C51	1-124-477-11	ELECT	47MF	20%	16V
C61	1-163-063-00	CERAMIC MELF	0.022MF		25V
C62	1-163-063-00	CERAMIC MELF	0.022MF		25V
C63	1-163-063-00	CERAMIC MELF	0.022MF		25V
C64	1-163-063-00	CERAMIC MELF	0.022MF		25V
C81	1-102-961-00	CERAMIC	27PF	5%	50V
C82	1-102-961-00	CERAMIC	27PF	5%	50V
C83	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C84	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C85	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C86	1-124-477-11	ELECT	47MF	20%	16V
C87	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C88	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C101	1-124-925-11	ELECT	2.2MF	20%	50V
C102	1-124-463-00	ELECT	0.1MF	20%	50V
C103	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C104	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C105	1-124-477-11	ELECT	47MF	20%	16V
CC2	1-249-366-11	CARBON MELF	0	5%	1/5W
CC3	1-249-366-11	CARBON MELF	0	5%	1/5W
CC11	1-249-366-11	CARBON MELF	0	5%	1/5W
CF1	1-567-389-11	FILTER, CERAMIC			
CF2	1-567-389-11	FILTER, CERAMIC			
CF21	1-577-075-11	OSCILLATOR, CERAMIC			
CFT21	1-404-853-11	TRANSFORMER, IF (CERAMIC FILTER)			
CNJ1	1-568-276-11	SOCKET, CONNECTOR 10P			
CNJ2	1-568-269-11	SOCKET, CONNECTOR 3P			
CNJ4	1-568-307-11	SOCKET, CONNECTOR 3P			
FE1	1-463-862-21	FRONT END, FM			
FE61	1-236-461-11	ENCAPSULATED COMPONENT			
IC21	8-759-821-45	IC LA1851N			
IC81	8-759-820-91	IC LC7218			
L1	1-410-521-11	MICRO INDUCTOR 100UH			
L3	1-410-501-11	MICRO INDUCTOR 2.2UH			
L21	1-410-171-11	MICRO INDUCTOR 1MH			
LPF21	1-235-164-00	FILTER, LOW PASS			
LPF22	1-235-164-00	FILTER, LOW PASS			
Q1	8-729-266-93	TRANSISTOR 2SC2669			
Q2	8-729-266-93	TRANSISTOR 2SC2669			
Q21	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q22	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q23	8-729-900-61	TRANSISTOR DTA114ES			
Q24	8-729-900-80	TRANSISTOR DTC114ES			
Q81	8-729-900-61	TRANSISTOR DTA114ES			
Q82	8-729-900-80	TRANSISTOR DTC114ES			
Q83	8-729-202-67	TRANSISTOR 2SK246GR3			
Q84	8-729-230-93	TRANSISTOR 2SC3113-AB			
R1	⚠ 1-249-401-11	CARBON	47	5%	1/4W F
R2	1-249-329-11	CARBON MELF	330	5%	1/8W
R3	1-249-329-11	CARBON MELF	330	5%	1/8W
R4	1-249-329-11	CARBON MELF	330	5%	1/8W
R5	1-249-329-11	CARBON MELF	330	5%	1/8W
R6	1-249-350-11	CARBON MELF	18K	5%	1/8W
R7	1-249-329-11	CARBON MELF	330	5%	1/8W

Ref.No.	Part No.	Description				
R8	1-249-332-11	CARBON MELF	560	5%	1/8W	
R9	1-249-352-11	CARBON MELF	27K	5%	1/8W	
R21 ⚠	1-249-404-00	CARBON	82	5%	1/4W	F
R22	1-249-426-11	CARBON	8.2K	5%	1/4W	
R23	1-249-335-11	CARBON MELF	1K	5%	1/8W	
R24	1-249-353-11	CARBON MELF	33K	5%	1/8W	
R25	1-249-428-11	CARBON MELF	8.2K	5%	1/8W	
R27	1-249-350-11	CARBON	18K	5%	1/8W	
R28	1-249-423-11	CARBON	3.3K	5%	1/4W	
R29	1-249-347-11	CARBON MELF	10K	5%	1/8W	
R31	1-249-331-11	CARBON MELF	470	5%	1/8W	
R32	1-249-347-11	CARBON MELF	10K	5%	1/8W	
R33	1-249-347-11	CARBON MELF	10K	5%	1/8W	
R35	1-249-355-11	CARBON MELF	47K	5%	1/8W	
R36	1-249-347-11	CARBON	10K	5%	1/4W	
R37	1-249-359-11	CARBON MELF	100K	5%	1/8W	
R38	1-249-363-11	CARBON MELF	220K	5%	1/8W	
R39	1-249-339-11	CARBON MELF	2.2K	5%	1/8W	
R48	1-249-359-11	CARBON MELF	100K	5%	1/8W	
R40	1-249-338-11	CARBON MELF	1.8K	5%	1/8W	
R41	1-249-344-11	CARBON MELF	5.6K	5%	1/8W	
R42	1-249-359-11	CARBON MELF	100K	5%	1/8W	
R49	1-249-359-11	CARBON MELF	100K	5%	1/8W	
R43	1-249-363-11	CARBON MELF	220K	5%	1/8W	
R44	1-249-339-11	CARBON MELF	2.2K	5%	1/8W	
R45	1-249-338-11	CARBON MELF	1.8K	5%	1/8W	
R46	1-249-344-11	CARBON MELF	5.6K	5%	1/8W	
R47 ⚠	1-249-409-11	CARBON	220	5%	1/4W	F
R61	1-249-359-11	CARBON MELF	100K	5%	1/8W	
R62	1-249-355-11	CARBON MELF	47K	5%	1/8W	
R63	1-249-315-11	CARBON MELF	22	5%	1/8W	
R81	1-249-335-11	CARBON MELF	1K	5%	1/8W	
R82	1-249-335-11	CARBON MELF	1K	5%	1/8W	
R83	1-249-335-11	CARBON MELF	1K	5%	1/8W	
R84	1-249-335-11	CARBON MELF	1K	5%	1/8W	
R85	1-249-347-11	CARBON MELF	10K	5%	1/8W	
R86	1-249-335-11	CARBON MELF	1K	5%	1/8W	
R87	1-249-347-11	CARBON MELF	10K	5%	1/8W	
R88	1-249-343-11	CARBON MELF	4.7K	5%	1/8W	
R89	1-249-335-11	CARBON MELF	1K	5%	1/8W	
R90	1-249-347-11	CARBON MELF	10K	5%	1/8W	
R91	1-249-335-11	CARBON MELF	1K	5%	1/8W	
R92 ⚠	1-249-401-11	CARBON	47	5%	1/4W	F
R101	1-249-341-11	CARBON MELF	3.3K	5%	1/8W	
R102	1-249-332-11	CARBON MELF	560	5%	1/8W	
R103	1-249-335-11	CARBON MELF	1K	5%	1/8W	
R104	1-249-328-11	CARBON MELF	270	5%	1/8W	
R105	1-249-343-11	CARBON MELF	4.7K	5%	1/8W	
R106	1-249-339-11	CARBON MELF	2.2K	5%	1/8W	
R107	1-249-343-11	CARBON MELF	4.7K	5%	1/8W	
R108	1-249-323-11	CARBON MELF	100	5%	1/8W	
R109	1-249-343-11	CARBON MELF	4.7K	5%	1/8W	
R110 ⚠	1-249-405-11	CARBON	100	5%	1/4W	F
RV21	1-238-013-11	RES, ADJ, CARBON 2.2K				
RV23	1-238-021-11	RES, ADJ, CARBON 220K				
RV24	1-238-017-11	RES, ADJ, CARBON 22K				
T21	1-404-807-11	TRANSFORMER, DISCRIMINATOR				
TM1	1-537-138-31	TERMINAL BOARD PUSH 4P (ANTENNA)				
TP1	*1-560-060-00	PIN, CONNECTOR 2P				
XT81	1-577-126-11	VIBRATOR, CRYSTAL (7.2MHz)				

Note:
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Replace only with part number specified.

Note:
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Ne les remplacer que par une pièce portant le numéro spécifié.

• EXCEPT FOR TUNER BOARD

Ref.No.	Part No.	Description
901	1-465-419-11	(GX60ES)...REMOTE COMMANDER (RM-P303)
	1-465-420-11	(GX50ES)...REMOTE COMMANDER (RM-U203)
	1-465-423-11	(GX40ES)...REMOTE COMMANDER (RM-S103)
902	*1-634-828-11	PC BOARD, P.SW
903	1-575-664-11	WIRE, FLAT TYPE (23 CORE)
904	*A-4334-521-A	(GX50ES,GX60ES)...MOUNTED PCB, DISPLAY
	*A-4334-522-A	(GX40ES).....MOUNTED PCB, DISPLAY
905	1-575-662-11	WIRE, FLAT TYPE (5 CORE)
906	*1-634-831-11	PC BOARD, MOTOR VOL
907	*1-634-832-11	PC BOARD, CONNECT (A)
908	*1-634-834-11	PC BOARD, TONE
909	*A-4334-507-A	(GX60ES:US).....MOUNTED PCB, MAIN
	*A-4334-508-A	(GX60ES:Canadian)...MOUNTED PCB, MAIN
	*A-4334-509-A	(GX50ES:US).....MOUNTED PCB, MAIN
	*A-4334-510-A	(GX50ES:Canadian)...MOUNTED PCB, MAIN
	*A-4334-511-A	(GX40ES:US).....MOUNTED PCB, MAIN
	*A-4334-512-A	(GX40ES:Canadian)...MOUNTED PCB, MAIN
910	*1-634-829-11	(GX50ES,GX60ES)...PC BOARD, VIDEO
911	*1-634-827-12	(GX60ES)...PC BOARD, REC OUT
912	*1-634-916-11	(GX60ES)...PC BOARD, REC OUT CONNECTOR
913	*A-4303-259-A	MOUNTED PCB, TUNER
914	*1-634-825-12	PC BOARD, SP SW
915	*1-634-838-11	PC BOARD, TRANS TERMINAL (B)
916	*A-4334-531-A	(GX60ES)...MOUNTED PCB, POWER SUPPLY
	*A-4334-532-A	(GX40ES)...MOUNTED PCB, POWER SUPPLY
	*A-4334-904-A	(GX50ES)...MOUNTED PCB, POWER SUPPLY
917	*1-634-839-11	PC BOARD, IMP SELECTION
918	*1-634-826-11	PC BOARD, SPEAKER TERMINAL
919	1-533-225-11	HOLDER, FUSE
920	⚠1-575-105-11	CORD, POWER
921	*1-634-833-11	PC BOARD, CONNECT (B)
922	*1-634-835-11	PC BOARD, TRANS TERMINAL (A)
923	1-575-663-11	WIRE, FLAT TYPE (5 CORE)
924	*1-535-624-11	TERMINAL, PIN JACK
925	*1-634-917-11	PC BOARD, WIRE CLAMP

C201	1-124-472-11	ELECT	470MF	20%	6.3V
C202	1-124-472-11	ELECT	470MF	20%	6.3V
C203	1-124-927-11	ELECT	4.7MF	20%	50V
C204	1-124-927-11	(GX50ES,GX60ES) ...ELECT	4.7MF	20%	50V
C205	1-164-097-11	(GX50ES,GX60ES) ...CERAMIC	0.022MF		50V
C301	1-124-438-00	ELECT	1MF	20%	50V
C302	1-164-097-11	CERAMIC	0.022MF		50V
C303	1-125-486-11	CAP,DOUBLE LAYERS	0.22F		5.5V

Ref.No.	Part No.	Description			
C304	1-136-165-00	FILM	0.1MF	5%	50V
C305	1-124-261-00	ELECT	10MF	20%	50V
C306	1-124-438-00	ELECT	1MF	20%	50V
C307	1-136-169-00	FILM	0.22MF	5%	50V
C308	1-136-153-00	FILM	0.01MF	5%	50V
C309	1-164-097-11	CERAMIC	0.022MF		50V
C310	1-164-097-11	CERAMIC	0.022MF		50V
C311	1-164-097-11	CERAMIC	0.022MF		50V
C312	1-124-438-00	ELECT	1MF	20%	50V
C313	1-164-159-11	CERAMIC	0.1MF		50V
C314	1-164-159-11	CERAMIC	0.1MF		50V
C401	1-162-282-31	CERAMIC	100PF	10%	50V
C402	1-126-163-11	ELECT	4.7MF	20%	50V
C403	1-124-963-11	ELECT	33MF	20%	16V
C404	1-130-480-00	MYLAR	0.0056MF	5%	50V
C405	1-106-347-00	MYLAR	0.0015MF	5%	50V
C406	1-124-438-00	ELECT	1MF	20%	50V
C407	1-124-589-11	ELECT	47MF	20%	16V
C408	1-124-589-11	ELECT	47MF	20%	16V
C409	1-164-097-11	CERAMIC	0.022MF		50V
C410	1-164-097-11	CERAMIC	0.022MF		50V
C411	1-164-097-11	CERAMIC	0.022MF		50V
C412	1-123-875-11	ELECT	10MF	20%	50V
C413	1-123-875-11	ELECT	10MF	20%	50V
C414	1-124-925-11	ELECT	2.2MF	20%	50V
C415	1-124-438-00	(GX40ES,GX50ES) ...ELECT	1MF	20%	50V
C416	1-164-098-11	CERAMIC	0.047MF		12V
C417	1-123-875-11	(GX40ES,GX50ES) ...ELECT	10MF	20%	50V
C451	1-162-282-31	CERAMIC	100PF	10%	50V
C452	1-126-163-11	ELECT	4.7MF	20%	50V
C453	1-124-963-11	ELECT	33MF	20%	16V
C454	1-130-480-00	MYLAR	0.0056MF	5%	50V
C455	1-106-347-00	MYLAR	0.0015MF	5%	50V
C456	1-124-438-00	ELECT	1MF	20%	50V
C462	1-123-875-11	ELECT	10MF	20%	50V
C464	1-124-925-11	ELECT	2.2MF	20%	50V
C465	1-124-438-00	(GX40ES,GX50ES) ...ELECT	1MF	20%	50V
C510	1-124-902-00	(GX50ES)...ELECT	0.47MF	20%	50V
C511	1-124-438-00	(GX50ES)...ELECT	1MF	20%	50V
C512	1-124-438-00	(GX50ES)...ELECT	1MF	20%	50V
C560	1-124-902-00	(GX50ES)...ELECT	0.47MF	20%	50V
C561	1-124-438-00	(GX50ES)...ELECT	1MF	20%	50V
C562	1-124-438-00	(GX50ES)...ELECT	1MF	20%	50V

Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Note:
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No.	Part No.	Description			
C601	1-130-485-00	MYLAR	0.015MF	5%	50V
C602	1-130-474-00	MYLAR	0.0018MF	5%	50V
C603	1-106-363-00	MYLAR	0.0068MF	5%	50V
C604	1-106-359-00	MYLAR	0.0047MF	5%	50V
C605	1-130-489-00	MYLAR	0.033MF	5%	50V
C610	1-124-273-00	ELECT	3.3MF	20%	50V
C611	1-162-294-31	CERAMIC	0.001MF	10%	50V
C651	1-130-485-00	MYLAR	0.015MF	5%	50V
C652	1-130-474-00	MYLAR	0.0018MF	5%	50V
C653	1-106-363-00	MYLAR	0.0068MF	5%	50V
C654	1-106-359-00	MYLAR	0.0047MF	5%	50V
C655	1-130-489-00	MYLAR	0.033MF	5%	50V
C701	1-164-077-11	CERAMIC	220PF	10%	50V
C702	1-124-927-11	ELECT	4.7MF	20%	50V
C703	1-102-989-00	CERAMIC	68PF	5%	500V
C704	1-124-122-11	ELECT	100MF	20%	50V
C705	1-164-039-11	CERAMIC	3PF	0.25PF	50V
C706	1-124-927-11	ELECT	4.7MF	20%	63V
C708	1-102-316-00	CERAMIC	15PF	5%	500V
C709	1-124-910-11	ELECT	47MF	20%	50V
C710	1-102-233-00	CERAMIC	33PF	10%	500V
C711	1-102-233-00	CERAMIC	33PF	10%	500V
C712	1-136-165-00	FILM	0.1MF	5%	50V
C713	1-136-165-00	FILM	0.1MF	5%	50V
C714	1-136-165-00	FILM	0.1MF	5%	50V
C715	1-124-472-11	ELECT	470MF	20%	6.3V
C716	1-136-157-00	(US).....FILM	0.022MF	5%	50V
C716	1-136-161-00	(Canadian)...FILM	0.047MF	5%	50V
C717	1-136-161-00	(Canadian)...FILM	0.047MF	5%	50V
C738	1-124-902-00	ELECT	0.47MF	20%	50V
C739	1-123-875-11	ELECT	10MF	20%	50V
C740	1-123-875-11	ELECT	10MF	20%	50V
C741	1-123-875-11	ELECT	10MF	20%	50V
C742	1-124-477-11	ELECT	47MF	20%	16V
C751	1-164-077-11	CERAMIC	220PF	10%	50V
C752	1-124-927-11	ELECT	4.7MF	20%	50V
C753	1-102-989-00	CERAMIC	68PF	5%	500V
C754	1-124-122-11	ELECT	100MF	20%	50V
C755	1-164-039-11	CERAMIC	3PF	0.25PF	50V
C756	1-124-927-11	ELECT	4.7MF	20%	63V
C758	1-102-316-00	CERAMIC	15PF	5%	500V
C759	1-124-910-11	ELECT	47MF	20%	50V
C760	1-102-233-00	CERAMIC	33PF	10%	500V
C761	1-102-233-00	CERAMIC	33PF	10%	500V
C762	1-136-165-00	FILM	0.1MF	5%	50V
C763	1-136-165-00	FILM	0.1MF	5%	50V
C766	1-136-157-00	(US).....FILM	0.022MF	5%	50V
C766	1-136-161-00	(Canadian)...FILM	0.047MF	5%	50V
C767	1-136-161-00	(Canadian)...FILM	0.047MF	5%	50V
C788	1-124-902-00	(US).....ELECT	0.47MF	20%	50V
C789	1-123-875-11	ELECT	10MF	20%	50V
C790	1-123-875-11	ELECT	10MF	20%	50V
C791	1-123-875-11	ELECT	10MF	20%	50V
C801	1-101-004-00	CERAMIC	0.01MF		50V
C802	1-101-004-00	CERAMIC	0.01MF		50V
C803	1-164-073-11	CERAMIC	100PF	10%	50V
C804	1-123-875-11	ELECT	10MF	20%	50V

Ref.No.	Part No.	Description			
C805	1-124-477-11	ELECT	47MF	20%	16V
C806	1-124-464-11	ELECT	0.22MF	20%	50V
C807	1-124-902-00	ELECT	0.47MF	20%	50V
C808	1-101-004-00	CERAMIC	0.01MF		50V
C809	1-124-557-11	ELECT	1000MF	20%	25V
C810	1-124-791-11	ELECT	1MF	20%	50V
C820	1-123-875-11	ELECT	10MF	20%	50V
C821	1-123-875-11	ELECT	10MF	20%	50V
C822	1-124-915-11	ELECT	10MF	20%	63V
C824	1-126-105-11	ELECT	1000MF	20%	35V
C825	1-126-104-11	ELECT	470MF	20%	35V
C826	1-124-477-11	ELECT	47MF	20%	16V
C827	1-124-477-11	ELECT	47MF	20%	16V
C828	1-161-379-00	CERAMIC	0.01MF	30%	16V
C829	1-161-379-00	CERAMIC	0.01MF	30%	16V
C830	1-102-394-11	CERAMIC	0.01MF		250V
C831	1-102-394-11	CERAMIC	0.01MF		250V
C832	1-102-394-11	CERAMIC	0.01MF		250V
C833	1-102-394-11	CERAMIC	0.01MF		250V
C834	1-124-922-11	ELECT	1000MF	20%	63V
C835	1-124-922-11	ELECT	1000MF	20%	63V
C836	1-125-479-11	(GX50ES,GX60ES) ...ELECT	10000MF	20%	63V
C836	1-125-614-11	(GX40ES)..ELECT	6800MF	20%	50V
C837	1-125-479-11	(GX50ES,GX60ES) ...ELECT	10000MF	20%	63V
C837	1-125-614-11	(GX40ES)..ELECT	6800MF	20%	50V
C840	1-164-096-11	CERAMIC	0.01MF		50V
C841	1-164-096-11	CERAMIC	0.01MF		50V
C901	1-161-744-00	CERAMIC	0.01MF		400V
CF301	1-577-101-11	VIBRATOR, CERAMIC			
CNJ201	1-565-319-11	(GX50ES,GX60ES)...JACK, PIN 2P (VIDEO IN/OUT MONITOR)			
CNJ202	1-565-319-11	(GX50ES,GX60ES)...JACK, PIN 2P (VIDEO IN/OUT)			
CNJ401	1-565-258-11	(GX40ES)...JACK, PIN 4P (PHONO CD DAT)			
CNJ401	1-565-320-11	(GX50ES,GX60ES)...JACK, PIN 6P (PHONO CD DAT)			
CNJ402	1-565-258-11	(GX40ES)...JACK, PIN 4P (TAPE)			
CNJ402	1-565-320-11	(GX50ES,GX60ES)...JACK, PIN 6P (DAT TAPE)			
CNJ403	1-565-258-11	(GX40ES)...JACK, PIN 4P (VIDEO)			
CNJ403	1-565-320-11	(GX50ES,GX60ES)...JACK, PIN 6P (VIDEO 1/2)			
CNJ404	1-565-258-11	(GX40ES)...JACK, PIN 4P (TAPE MONITOR)			
CNJ404	1-565-258-11	(GX50ES,GX60ES)..JACK, PIN 4P(ADAPTOR)			
CNJ701	1-569-348-11	JACK, LARGE TYPE (HEADPHONES)			
CNP301*1	1-565-295-11	PLUG, CONNECTOR 4P			
CNP302	1-506-906-11	PIN, CONNECTOR 5P			
CNP303	1-506-906-11	PIN, CONNECTOR 5P			
CNP401*1	1-569-507-11	(GX60ES)...PIN, CONNECTOR 12P			
CNP402*1	1-569-504-11	(GX60ES)...PIN, CONNECTOR 9P			
CNP701*1	1-564-507-11	PLUG, CONNECTOR 4P			
CNP702*1	1-564-507-11	PLUG, CONNECTOR 4P			
CNP703*1	1-564-506-11	PLUG, CONNECTOR 3P			
CNP705*1	1-569-396-11	PIN, CONNECTOR 4P			

Ref.No.	Part No.	Description
CNP706	*1-564-508-11	PLUG, CONNECTOR 5P
CNP707	*1-564-509-11	PLUG, CONNECTOR 6P
CNP708	*1-560-063-00	PIN, CONNECTOR 5P
CNP709	*1-535-116-00	TERMINAL
CNP801	*1-564-104-00	PIN, CONNECTOR 3P
CNP803	*1-569-396-11	PIN, CONNECTOR 4P
CNP901	*1-564-321-00	PIN, CONNECTOR 2P
CNP902	*1-535-139-00	BASE POST 19MM (10MM PITCH) 2P
CNP906	*1-564-104-00	PIN, CONNECTOR 3P
CNP907	1-564-104-00	(GX40ES,GX50ES)...PIN, CONNECTOR 3P
CNP908	*1-564-104-00	(GX60ES)...PIN, CONNECTOR 3P
CNP909	*1-560-061-00	PIN, CONNECTOR 3P
CNP910	*1-560-061-00	PIN, CONNECTOR 3P
CNP911	*1-560-061-00	PIN, CONNECTOR 3P
CNS001	*1-569-387-11	SOCKET, CONNECTOR (PC BOARD)10P
CNS002	*1-569-380-11	SOCKET, CONNECTOR (PC BOARD) 3P
CNS003	*1-569-380-11	SOCKET, CONNECTOR (PC BOARD) 3P
CNS201	*1-568-824-11	(GX50ES,GX60ES)...SOCKET, CONNECTOR 5P
CNS202	*1-568-824-11	(GX50ES,GX60ES)...SOCKET, CONNECTOR 5P
CNS301	*1-565-480-11	CONNECTOR, BOARD TO BOARD 4P
CNS302	*1-561-650-00	SOCKET, CONNECTOR 5P
CNS303	*1-561-650-00	SOCKET, CONNECTOR 5P
CNS304	*1-568-865-11	SOCKET, CONNECTOR 23P
CNS305	*1-568-839-11	SOCKET, CONNECTOR 23P
CNS401	*1-569-498-11	(GX60ES)...SOCKET, CONNECTOR 12P
CNS402	*1-569-495-11	(GX60ES)...SOCKET, CONNECTOR 9P
CNS403	*1-568-824-11	(GX60ES)...SOCKET, CONNECTOR 5P
CNS404	*1-568-824-11	(GX60ES)...SOCKET, CONNECTOR 5P
CNS603	*1-564-505-11	PLUG, CONNECTOR 2P
CNS604	*1-568-824-11	SOCKET, CONNECTOR 5P
CNS704	*1-568-824-11	SOCKET, CONNECTOR 5P
CNS705	*1-569-397-11	SOCKET, CONNECTOR 4P
CNS803	*1-569-397-11	SOCKET, CONNECTOR 4P
CNS901	⚠1-540-059-11	OUTLET, AC (POWER)
D301	8-719-912-20	DIODE 1SS120
D302	8-719-914-11	DIODE HZ4ALL
D303	8-719-912-20	DIODE 1SS120
D305	8-719-912-20	DIODE 1SS120
D306	8-719-912-20	DIODE 1SS120
D307	8-719-912-20	DIODE 1SS120
D308	8-719-912-20	DIODE 1SS120
D309	8-719-912-20	DIODE 1SS120
D310	8-719-912-20	DIODE 1SS120
D311	8-719-912-20	DIODE 1SS120
D312	8-719-912-20	DIODE 1SS120
D313	8-719-912-20	DIODE 1SS120
D314	8-719-912-20	DIODE 1SS120
D315	8-719-301-52	(GX50ES,GX60ES)...DIODE SEL2810A-C (VIDEO 1)
D316	8-719-301-52	(GX50ES,GX60ES)...DIODE SEL2810A-C (DIDEO 2)
D317	8-719-310-78	DIODE SEL1810W-C (MUTING)
D318	8-719-301-52	DIODE SEL2810A-C (ADAOTIR)
D319	8-719-912-20	DIODE 1SS120
D324	8-719-912-20	DIODE 1SS120
D325	8-719-912-20	(GX50ES,GX60ES)...DIODE 1SS120
D327	8-719-912-20	DIODE 1SS120
D328	8-719-912-20	(GX50ES,GX60ES)...DIODE 1SS120
D329	8-719-912-20	DIODE 1SS120
D330	8-719-912-20	DIODE 1SS120
D331	8-719-912-20	DIODE 1SS120
D401	8-719-912-20	(GX40ES,GX50ES)...DIODE 1SS120
D602	8-719-303-00	DIODE SEL2510C (ATTENUATOR)
D701	8-719-912-20	DIODE 1SS120
D702	8-719-912-20	DIODE 1SS120
D703	8-719-912-20	DIODE 1SS120
D704	8-719-912-20	DIODE 1SS120
D705	8-719-912-20	DIODE 1SS120
D710	8-719-912-20	DIODE 1SS120
D711	8-719-912-20	DIODE 1SS120
D712	8-719-912-20	DIODE 1SS120
D713	8-719-912-20	DIODE 1SS120
D714	8-719-912-20	DIODE 1SS120
D715	8-719-912-20	DIODE 1SS120
D720	8-719-912-20	DIODE 1SS120
D721	8-719-912-20	DIODE 1SS120
D751	8-719-912-20	DIODE 1SS120
D752	8-719-912-20	DIODE 1SS120
D753	8-719-912-20	DIODE 1SS120
D801	8-719-912-20	DIODE 1SS120
D802	8-719-912-20	DIODE 1SS120
D803	8-719-912-20	DIODE 1SS120
D804	8-719-200-82	DIODE 11ES2
D805	8-719-200-82	DIODE 11ES2
D806	8-719-200-82	DIODE 11ES2
D807	8-719-200-82	DIODE 11EA2
D808	8-719-933-41	DIODE HZS6C3L
D809	8-719-914-11	DIODE HZ4ALL
D810	8-719-912-20	DIODE 1SS120
D811	8-719-933-41	DIODE HZS6C3L
D812	8-719-014-66	DIODE UZP-5.6B
D820	8-719-934-00	DIODE HZS22-2L
D822	8-719-200-82	DIODE 11ES2
D823	8-719-200-82	DIODE 11ES2
D824	8-719-200-82	DIODE 11ES2
D825	8-719-200-82	DIODE 11ES2
D826	8-719-200-82	DIODE 11ES2
D827	8-719-200-82	DIODE 11ES2
D828	8-719-200-82	DIODE 11ES2
D829	8-719-200-82	DIODE 11ES2
D830	8-719-302-38	DIODE RBV-602-01
F801	⚠1-532-748-11	(GX40ES)...FUSE, GLASS TUBE (6.3A)
F801	⚠1-532-749-11	(GX50ES,GX60ES)...FUSE, GLASS TUBE(8A)
F802	⚠1-532-748-11	(GX40ES)...FUSE, GLASS TUBE (6.3A)
F802	⚠1-532-749-11	(GX50ES,GX60ES)...FUSE, GLASS TUBE(8A)
F901	⚠1-532-598-00	FUSE, GLASS TUBE (4A)
F902	⚠1-532-749-11	(GX60ES)...FUSE, GLASS TUBE (8A)
FL301	1-519-590-11	INDICATOR TUBE, FLUORESCENT
IC201	8-759-991-77	(GX50ES,GX60ES)...IC BA7625
IC301	8-759-149-47	IC UPD75206G-557-1B
IC302	8-759-801-57	IC LB1494
IC303	8-749-920-83	IC GP1U52XB
IC304	8-759-820-62	IC LB1639
IC401	8-759-805-14	IC LC7822

Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Note:
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No.	Part No.	Description
IC402	8-759-805-14	(GX50ES,GX60ES)...IC LC7822
IC403	8-759-112-93	IC UPC4570HA-1
IC406	8-759-710-73	(GX60ES)...IC NJM4580L
IC407	8-759-710-73	(GX60ES)...IC NJM4580L
IC408	8-759-710-73	(GX60ES)...IC NJM4580L
IC409	8-759-710-73	(GX60ES)...IC NJM4580L
IC410	8-759-710-73	(GX60ES)...IC NJM4580L
IC411	8-759-710-73	IC NJM4580L
IC701	8-749-920-70	IC STK3102-3
IC702	8-759-501-55	IC BA6125
IC703	8-759-710-73	IC NJM4580L
IC752	8-759-501-55	IC BA6125
IC802	8-759-501-47	IC LM78M12
IC803	8-759-604-45	IC M5F79M12
L201	1-410-521-11	(GX50ES,GX60ES)...INDUCTOR 100UH
L301	1-410-509-11	INDUCTOR 10UH
L701	*1-420-872-00	COIL, AIR CORE
L751	*1-420-872-00	COIL, AIR CORE
PH701	8-719-984-76	DIODE PC837
PH751	8-719-984-76	DIODE PC837
Q201	8-729-119-76	(GX50ES,GX60ES)..TRANSISTOR 2SA1175-HFE
Q202	8-729-119-76	(GX50ES,GX60ES)..TRANSISTOR 2SA1175-HFE
Q301	8-729-900-36	TRANSISTOR DTC124ES
Q303	8-729-900-63	(GX50ES,GX60ES)...TRANSISTOR DTA124ES
Q304	8-729-900-36	(GX50ES,GX60ES)...TRANSISTOR DTC124ES
Q305	8-729-900-63	(GX50ES,GX60ES)...TRANSISTOR DTA124ES
Q401	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q402	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q403	8-729-141-30	TRANSISTOR 2SC3623A-LK
Q404	8-729-141-30	TRANSISTOR 2SC3623A-LK
Q405	8-729-141-30	TRANSISTOR 2SC3623A-LK
Q406	8-729-900-36	TRANSISTOR DTC124ES
Q407	8-729-900-36	(GX40ES,GX50ES)...TRANSISTOR DTC124ES
Q453	8-729-141-30	TRANSISTOR 2SC3623A-LK
Q454	8-729-141-30	TRANSISTOR 2SC3623A-LK
Q455	8-729-141-30	TRANSISTOR 2SC3623A-LK
Q510	8-729-900-36	(GX50ES)...TRANSISTOR DTC124ES
Q511	8-729-119-76	(GX50ES)...TRANSISTOR 2SA1175-HFE
Q512	8-729-224-63	(GX50ES)...TRANSISTOR 2SK246BL
Q560	8-729-900-36	(GX50ES)...TRANSISTOR DTC124ES
Q561	8-729-119-76	(GX50ES)...TRANSISTOR 2SA1175-HFE
Q562	8-729-224-63	(GX50ES)...TRANSISTOR 2SK246BL
Q701	8-729-209-15	TRANSISTOR 2SD2012
Q702	8-729-141-46	TRANSISTOR 2SC4431-LK
Q703	8-729-141-37	TRANSISTOR 2SA1684-LK
Q704	8-729-320-96	TRANSISTOR 2SC2921-OPY
Q705	8-729-320-73	TRANSISTOR 2SA1215-OY
Q706	8-729-108-14	TRANSISTOR 2SA988-F
Q707	8-729-108-14	TRANSISTOR 2SA988-F
Q708	8-729-140-84	TRANSISTOR 2SA1841-PAFAEA
Q709	8-729-620-05	TRANSISTOR 2SC2603-EF
Q710	8-729-620-05	TRANSISTOR 2SC2603-EF
Q711	8-729-620-05	TRANSISTOR 2SC2603-EF
Q720	8-729-620-05	TRANSISTOR 2SC2603-EF
Q721	8-729-620-05	TRANSISTOR 2SC2603-EF
Q751	8-729-209-15	TRANSISTOR 2SD2012

Ref.No.	Part No.	Description
Q752	8-729-141-46	TRANSISTOR 2SC4431-LK
Q753	8-729-141-37	TRANSISTOR 2SA1684-LK
Q754	8-729-320-96	TRANSISTOR 2SC2921-OPY
Q755	8-729-320-73	TRANSISTOR 2SA1215-OY
Q756	8-729-108-14	TRANSISTOR 2SA988-F
Q757	8-729-108-14	TRANSISTOR 2SA988-F
Q802	8-729-620-05	TRANSISTOR 2SC2603-EF
Q803	8-729-209-15	TRANSISTOR 2SD2012
Q804	8-729-620-05	TRANSISTOR 2SC2603-EF
Q805	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q806	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q807	8-729-900-63	TRANSISTOR DTA124ES
Q808	8-729-620-05	TRANSISTOR 2SC2603-EF
Q809	8-729-900-89	TRANSISTOR DTC144ES
Q820	8-729-141-06	TRANSISTOR 2SA1142-QPE
R201	1-249-429-11	(GX50ES,GX60ES) ...CARBON 10K 5% 1/4W
R202	1-249-429-11	(GX50ES,GX60ES) ...CARBON 10K 5% 1/4W
R203	1-247-804-11	(GX50ES,GX60ES) ...CARBON 75 5% 1/4W
R204	1-247-804-11	(GX50ES,GX60ES) ...CARBON 75 5% 1/4W
R205	1-249-403-11	(GX50ES,GX60ES) ...CARBON 68 5% 1/4W
R206	1-249-403-11	(GX50ES,GX60ES) ...CARBON 68 5% 1/4W
R207	1-249-405-11	(GX50ES,GX60ES) ...CARBON 100 5% 1/4W
R208	1-249-405-11	(GX50ES,GX60ES) ...CARBON 100 5% 1/4W
R209	1-249-405-11	(GX50ES,GX60ES) ...CARBON 100 5% 1/4W
R210	1-249-405-11	(GX50ES,GX60ES) ...CARBON 100 5% 1/4W
R301	1-249-429-11	CARBON 10K 5% 1/4W
R303	1-249-417-11	CARBON 1K 5% 1/4W
R304	1-249-441-11	CARBON 100K 5% 1/4W
R305	1-249-405-11	CARBON 100 5% 1/4W
R306	1-249-405-11	CARBON 100 5% 1/4W
R307	1-249-409-11	(GX50ES,GX60ES) ...CARBON 220 5% 1/4W
R308	1-249-409-11	(GX50ES,GX60ES) ...CARBON 220 5% 1/4W
R309	1-249-405-11	CARBON 100 5% 1/4W
R311	1-249-441-11	CARBON 100K 5% 1/4W
R312	1-249-429-11	CARBON 10K 5% 1/4W
R313	1-249-437-11	CARBON 47K 5% 1/4W
R314	1-249-437-11	CARBON 47K 5% 1/4W
R315	1-249-413-11	CARBON 470 5% 1/4W
R317	1-249-407-11	CARBON 150 5% 1/4W
R321	1-249-411-11	CARBON 330 5% 1/4W
R322	1-249-411-11	CARBON 330 5% 1/4W
R323	1-249-411-11	CARBON 330 5% 1/4W
R324	1-249-411-11	CARBON 330 5% 1/4W
R325	1-249-425-11	CARBON 4.7K 5% 1/4W

Ref.No.	Part No.	Description				
R326	1-249-425-11	CARBON	4.7K	5%	1/4W	
R327	1-249-425-11	CARBON	4.7K	5%	1/4W	
R328	1-249-425-11	CARBON	4.7K	5%	1/4W	
R329 ⚠	1-249-457-11	(GX50ES,GX60ES) ...CARBON	6.8	5%	1/4W	F
R329 ⚠	1-249-447-11	(GX40ES)..CARBON	1	5%	1/4W	F
R330 ⚠	1-249-457-11	(GX50ES,GX60ES) ...CARBON	6.8	5%	1/4W	F
R330 ⚠	1-249-447-11	(GX40ES)..CARBON	1	5%	1/4W	F
R331	1-249-437-11	CARBON	47K	5%	1/4W	
R332	1-249-437-11	CARBON	47K	5%	1/4W	
R333	1-249-437-11	CARBON	47K	5%	1/4W	
R334	1-249-437-11	CARBON	47K	5%	1/4W	
R335	1-249-437-11	CARBON	47K	5%	1/4W	
R336	1-249-437-11	CARBON	47K	5%	1/4W	
R337	1-249-437-11	CARBON	47K	5%	1/4W	
R338	1-249-437-11	CARBON	47K	5%	1/4W	
R339	1-249-437-11	CARBON	47K	5%	1/4W	
R340	1-249-437-11	CARBON	47K	5%	1/4W	
R341	1-249-437-11	CARBON	47K	5%	1/4W	
R342	1-249-437-11	CARBON	47K	5%	1/4W	
R343	1-249-437-11	CARBON	47K	5%	1/4W	
R344	1-249-437-11	CARBON	47K	5%	1/4W	
R345	1-249-437-11	CARBON	47K	5%	1/4W	
R346	1-249-437-11	CARBON	47K	5%	1/4W	
R347	1-249-413-11	CARBON	470	5%	1/4W	
R348	1-249-437-11	CARBON	47K	5%	1/4W	
R349	1-249-437-11	CARBON	47K	5%	1/4W	
R350	1-249-437-11	CARBON	47K	5%	1/4W	
R351	1-249-437-11	CARBON	47K	5%	1/4W	
R352	1-249-437-11	CARBON	47K	5%	1/4W	
R353	1-249-437-11	CARBON	47K	5%	1/4W	
R354	1-249-437-11	CARBON	47K	5%	1/4W	
R355	1-249-437-11	CARBON	47K	5%	1/4W	
R356	1-249-437-11	CARBON	47K	5%	1/4W	
R357	1-249-437-11	CARBON	47K	5%	1/4W	
R358	1-249-437-11	CARBON	47K	5%	1/4W	
R359	1-249-437-11	CARBON	47K	5%	1/4W	
R360	1-249-433-11	CARBON	22K	5%	1/4W	
R361	1-249-437-11	CARBON	47K	5%	1/4W	
R362	1-249-437-11	CARBON	47K	5%	1/4W	
R370	1-249-429-11	CARBON	10K	5%	1/4W	
R401	1-249-411-11	CARBON	330	5%	1/4W	
R402	1-249-417-11	(GX50ES,GX60ES) ...CARBON	1K	5%	1/4W	
R403	1-249-417-11	CARBON	1K	5%	1/4W	
R404	1-249-417-11	CARBON	1K	5%	1/4W	
R405	1-249-417-11	CARBON	1K	5%	1/4W	
R406	1-249-437-11	CARBON	47K	5%	1/4W	
R408	1-249-417-11	(GX50ES,GX60ES) ...CARBON	1K	5%	1/4W	
R409	1-249-437-11	(GX50ES,GX60ES) ...CARBON	47K	5%	1/4W	
R411	1-249-417-11	CARBON	1K	5%	1/4W	
R412	1-249-437-11	CARBON	47K	5%	1/4W	
R413	1-249-437-11	(GX60ES)...CARBON	47K	5%	1/4W	
R414	1-249-417-11	(GX50ES,GX60ES) ...CARBON	1K	5%	1/4W	

Ref.No.	Part No.	Description			
R415	1-249-437-11	(GX50ES,GX60ES) ...CARBON	47K	5%	1/4W
R416	1-249-437-11	(GX60ES)...CARBON	47K	5%	1/4W
R417	1-249-417-11	(GX60ES)...CARBON	1K	5%	1/4W
R418	1-249-437-11	(GX60ES)...CARBON	47K	5%	1/4W
R419	1-249-437-11	(GX60ES)...CARBON	47K	5%	1/4W
R420	1-249-417-11	CARBON	1K	5%	1/4W
R421	1-249-437-11	CARBON	47K	5%	1/4W
R422	1-249-437-11	(GX60ES)...CARBON	47K	5%	1/4W
R423	1-249-437-11	CARBON	47K	5%	1/4W
R424	1-249-441-11	CARBON	100K	5%	1/4W
R425	1-249-417-11	CARBON	1K	5%	1/4W
R426	1-247-897-11	CARBON	560K	5%	1/4W
R427	1-249-437-11	CARBON	47K	5%	1/4W
R428	1-249-441-11	CARBON	100K	5%	1/4W
R429	1-249-417-11	CARBON	1K	5%	1/4W
R430	1-249-417-11	(GX60ES)...CARBON	1K	5%	1/4W
R431	1-249-437-11	(GX60ES)...CARBON	47K	5%	1/4W
R432	1-249-437-11	(GX60ES)...CARBON	47K	5%	1/4W
R433	1-249-425-11	CARBON	4.7K	5%	1/4W
R434	1-249-429-11	CARBON	10K	5%	1/4W
R435	1-249-429-11	CARBON	10K	5%	1/4W
R436	1-249-425-11	CARBON	4.7K	5%	1/4W
R437	1-249-429-11	CARBON	10K	5%	1/4W
R438	1-249-441-11	CARBON	100K	5%	1/4W
R439	1-249-421-11	CARBON	2.2K	5%	1/4W
R440	1-249-417-11	CARBON	1K	5%	1/4W
R441	1-249-405-11	CARBON	100	5%	1/4W
R442	1-249-441-11	CARBON	100K	5%	1/4W
R443	1-249-441-11	CARBON	100K	5%	1/4W
R444	1-249-441-11	(GX40ES,GX50ES) ...CARBON	100K	5%	1/4W
R451	1-249-411-11	CARBON	330	5%	1/4W
R452	1-249-417-11	(GX50ES,GX60ES) ...CARBON	1K	5%	1/4W
R453	1-249-417-11	CARBON	1K	5%	1/4W
R454	1-249-417-11	CARBON	1K	5%	1/4W
R455	1-249-417-11	CARBON	1K	5%	1/4W
R456	1-249-437-11	CARBON	47K	5%	1/4W
R458	1-249-417-11	(GX50ES,GX60ES) ...CARBON	1K	5%	1/4W
R459	1-249-437-11	(GX50ES,GX60ES) ...CARBON	47K	5%	1/4W
R461	1-249-417-11	CARBON	1K	5%	1/4W
R462	1-249-437-11	CARBON	47K	5%	1/4W
R463	1-249-437-11	(GX60ES)...CARBON	47K	5%	1/4W
R464	1-249-417-11	(GX50ES,GX60ES) ...CARBON	1K	5%	1/4W
R465	1-249-437-11	(GX50ES,GX60ES) ...CARBON	47K	5%	1/4W
R466	1-249-437-11	(GX60ES)...CARBON	47K	5%	1/4W
R467	1-249-417-11	(GX60ES)...CARBON	1K	5%	1/4W
R468	1-249-437-11	(GX60ES)...CARBON	47K	5%	1/4W
R469	1-249-437-11	(GX60ES)...CARBON	47K	5%	1/4W
R470	1-249-417-11	CARBON	1K	5%	1/4W
R471	1-249-437-11	CARBON	47K	5%	1/4W
R472	1-249-437-11	(GX60ES)...CARBON	47K	5%	1/4W
R473	1-249-437-11	CARBON	47K	5%	1/4W

Note:
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Ref.No.	Part No.	Description				
R474	1-249-441-11	CARBON	100K	5%	1/4W	
R475	1-249-417-11	CARBON	1K	5%	1/4W	
R476	1-247-897-11	CARBON	560K	5%	1/4W	
R477	1-249-437-11	CARBON	47K	5%	1/4W	
R478	1-249-441-11	CARBON	100K	5%	1/4W	
R479	1-249-417-11	CARBON	1K	5%	1/4W	
R480	1-249-417-11	(GX60ES)...CARBON	1K	5%	1/4W	
R481	1-249-437-11	(GX60ES)...CARBON	47K	5%	1/4W	
R482	1-249-437-11	(GX60ES)...CARBON	47K	5%	1/4W	
R486	1-249-425-11	CARBON	4.7K	5%	1/4W	
R487	1-249-429-11	CARBON	10K	5%	1/4W	
R490	1-249-417-11	CARBON	1K	5%	1/4W	
R491	1-249-405-11	CARBON	100	5%	1/4W	
R494	1-249-441-11	(GX40ES,GX50ES) ...CARBON	100K	5%	1/4W	
R501	1-249-437-11	CARBON	47K	5%	1/4W	
R502	1-249-437-11	CARBON	47K	5%	1/4W	
R506	1-249-405-11	(GX60ES)...CARBON	100	5%	1/4W	
R506	1-249-417-11	(GX40ES,GX50ES) ...CARBON	1K	5%	1/4W	
R507	1-249-405-11	(GX60ES)...CARBON	100	5%	1/4W	
R507	1-249-417-11	(GX40ES,GX50ES) ...CARBON	1K	5%	1/4W	
R510	1-249-441-11	(GX50ES)...CARBON	100K	5%	1/4W	
R511	1-247-903-00	(GX50ES)...CARBON	1M	5%	1/4W	
R512	1-247-899-11	(GX50ES)...CARBON	680K	5%	1/4W	
R513	1-249-417-11	(GX50ES)...CARBON	1K	5%	1/4W	
R551	1-249-437-11	CARBON	47K	5%	1/4W	
R552	1-249-437-11	CARBON	47K	5%	1/4W	
R556	1-249-405-11	(GX60ES)...CARBON	100	5%	1/4W	
R556	1-249-417-11	(GX40ES,GX50ES) ...CARBON	1K	5%	1/4W	
R557	1-249-405-11	(GX60ES)...CARBON	100	5%	1/4W	
R557	1-249-417-11	(GX40ES,GX50ES) ...CARBON	1K	5%	1/4W	
R560	1-249-441-11	(GX50ES)...CARBON	100K	5%	1/4W	
R561	1-247-903-00	(GX50ES)...CARBON	1M	5%	1/4W	
R562	1-247-899-11	(GX50ES)...CARBON	680K	5%	1/4W	
R563	1-249-417-11	(GX50ES)...CARBON	1K	5%	1/4W	
R601	1-249-438-11	CARBON	56K	5%	1/4W	
R602	1-249-426-11	CARBON	5.6K	5%	1/4W	
R603	1-249-421-11	CARBON	2.2K	5%	1/4W	
R604	1-247-870-11	CARBON	43K	5%	1/4W	
R606	1-247-852-11	CARBON	7.5K	5%	1/4W	
R607	1-249-437-11	CARBON	47K	5%	1/4W	
R608	1-249-429-11	CARBON	10K	5%	1/4W	
R609	1-247-903-00	CARBON	1M	5%	1/4W	
R610	1-247-903-00	CARBON	1M	5%	1/4W	
R614	1-249-413-11	CARBON	470	5%	1/4W	
R620	1-249-436-11	CARBON	39K	5%	1/4W	
R651	1-249-438-11	CARBON	56K	5%	1/4W	
R652	1-249-426-11	CARBON	5.6K	5%	1/4W	
R653	1-249-421-11	CARBON	2.2K	5%	1/4W	
R654	1-247-870-11	CARBON	43K	5%	1/4W	
R656	1-247-852-11	CARBON	7.5K	5%	1/4W	
R657	1-249-437-11	CARBON	47K	5%	1/4W	

Ref.No.	Part No.	Description				
R658	1-249-429-11	CARBON	10K	5%	1/4W	
R659	1-247-903-00	CARBON	1M	5%	1/4W	
R660	1-247-903-00	CARBON	1M	5%	1/4W	
R670	1-249-436-11	CARBON	39K	5%	1/4W	
R701	1-249-417-11	CARBON	1K	5%	1/4W	
R702	1-247-878-00	CARBON	91K	5%	1/4W	
R703	1-249-413-11	(GX60ES)...CARBON	470	5%	1/4W	
R703	1-249-442-11	(GX50ES)...CARBON	510	5%	1/4W	
R703	1-249-415-11	(GX40ES)...CARBON	680	5%	1/4W	
R704	1-249-413-11	CARBON	470	5%	1/4W	
R705	1-249-441-11	CARBON	100K	5%	1/4W	
R706	1-249-417-11	CARBON	1K	5%	1/4W	
R708	1-249-412-11	CARBON	390	5%	1/4W	
R709 ⚠	1-247-704-11	CARBON	220	5%	1/4W	F
R710 ⚠	1-249-455-11	CARBON	4.7	5%	1/4W	F
R711 ⚠	1-249-455-11	CARBON	4.7	5%	1/4W	F
R712 ⚠	1-214-789-00	RES, METAL PLATE 0.1				
R713 ⚠	1-214-789-00	RES, METAL PLATE 0.1				
R714	1-249-417-11	CARBON	1K	5%	1/4W	
R716	1-249-431-11	CARBON	15K	5%	1/4W	
R717	1-249-417-11	CARBON	1K	5%	1/4W	
R718	1-249-431-11	CARBON	15K	5%	1/4W	
R719	1-249-433-11	CARBON	22K	5%	1/4W	
R720	1-249-482-11	CARBON	4.7	5%	1/2W	
R721	1-247-727-11	CARBON	10	5%	1/2W	
R722	1-249-429-11	CARBON	10K	5%	1/4W	
R723	1-249-437-11	CARBON	47K	5%	1/4W	
R730	1-249-429-11	CARBON	10K	5%	1/4W	
R731	1-249-437-11	CARBON	47K	5%	1/4W	
R732	1-249-417-11	CARBON	1K	5%	1/4W	
R733	1-249-436-11	CARBON	39K	5%	1/4W	
R735 ⚠	1-216-431-11	METAL OXIDE	560	5%	1W	F
R740	1-249-429-11	CARBON	10K	5%	1/4W	
R741	1-249-427-11	CARBON	6.8K	5%	1/4W	
R742	1-247-848-11	CARBON	5.1K	5%	1/4W	
R743	1-249-432-11	(GX60ES)...CARBON	18K	5%	1/4W	
R743	1-247-862-11	(GX50ES)...CARBON	20K	5%	1/4W	
R743	1-249-433-11	(GX40ES)...CARBON	22K	5%	1/4W	
R744	1-249-441-11	CARBON	100K	5%	1/4W	
R745	1-249-429-11	CARBON	10K	5%	1/4W	
R746	1-249-417-11	CARBON	1K	5%	1/4W	
R747	1-249-427-11	CARBON	6.8K	5%	1/4W	
R748	1-249-441-11	CARBON	100K	5%	1/4W	
R749	1-249-441-11	CARBON	100K	5%	1/4W	
R751	1-249-417-11	CARBON	1K	5%	1/4W	
R752	1-247-878-00	CARBON	91K	5%	1/4W	
R753	1-249-413-11	(GX60ES)...CARBON	470	5%	1/4W	
R753	1-249-442-11	(GX50ES)...CARBON	510	5%	1/4W	
R753	1-249-415-11	(GX40ES)...CARBON	680	5%	1/4W	
R754	1-249-413-11	CARBON	470	5%	1/4W	
R755	1-249-441-11	CARBON	100K	5%	1/4W	
R756	1-249-417-11	CARBON	1K	5%	1/4W	
R758	1-249-412-11	CARBON	390	5%	1/4W	
R759 ⚠	1-247-704-11	CARBON	220	5%	1/4W	F
R760 ⚠	1-249-455-11	CARBON	4.7	5%	1/4W	F

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Ref.No.	Part No.	Description				
R761 ⚠	1-249-455-11	CARBON	4.7	5%	1/4W	F
R762 ⚠	1-214-789-00	RES, METAL PLATE 0.1				
R763 ⚠	1-214-789-00	RES, METAL PLATE 0.1				
R764	1-249-417-11	CARBON	1K	5%	1/4W	
R766	1-249-431-11	CARBON	15K	5%	1/4W	
R767	1-249-417-11	CARBON	1K	5%	1/4W	
R768	1-249-431-11	CARBON	15K	5%	1/4W	
R769	1-249-434-11	CARBON	27K	5%	1/4W	
R770	1-249-482-11	CARBON	4.7	5%	1/2W	
R771	1-247-727-11	CARBON	10	5%	1/2W	
R785 ⚠	1-216-431-11	METAL OXIDE	560	5%	1W	F
R790	1-249-429-11	CARBON	10K	5%	1/4W	
R791	1-249-427-11	CARBON	6.8K	5%	1/4W	
R792	1-247-848-11	CARBON	5.1K	5%	1/4W	
R793	1-249-432-11	(GX60ES)...CARBON	18K	5%	1/4W	
R793	1-247-862-11	(GX50ES)...CARBON	20K	5%	1/4W	
R793	1-249-433-11	(GX40ES)...CARBON	22K	5%	1/4W	
R794	1-249-441-11	CARBON	100K	5%	1/4W	
R795	1-249-429-11	CARBON	10K	5%	1/4W	
R796	1-249-417-11	CARBON	1K	5%	1/4W	
R797	1-249-427-11	CARBON	6.8K	5%	1/4W	
R798	1-249-441-11	CARBON	100K	5%	1/4W	
R799	1-249-441-11	CARBON	100K	5%	1/4W	
R801 ⚠	1-247-691-11	CARBON	18	5%	1/4W	F
R802	1-249-417-11	CARBON	1K	5%	1/4W	
R804	1-249-433-11	CARBON	22K	5%	1/4W	
R805	1-249-437-11	CARBON	47K	5%	1/4W	
R806	1-249-425-11	CARBON	4.7K	5%	1/4W	
R807	1-249-429-11	CARBON	10K	5%	1/4W	
R808	1-249-417-11	CARBON	1K	5%	1/4W	
R809	1-249-429-11	CARBON	10K	5%	1/4W	
R810	1-249-429-11	CARBON	10K	5%	1/4W	
R812	1-249-426-11	CARBON	5.6K	5%	1/4W	
R813	1-249-417-11	CARBON	1K	5%	1/4W	
R814	1-249-426-11	CARBON	5.6K	5%	1/4W	
R815	1-247-895-00	CARBON	470K	5%	1/4W	
R820	1-249-429-11	CARBON	10K	5%	1/4W	
R821 ⚠	1-247-752-11	CARBON	1K	5%	1/2W	F
R822 ⚠	1-212-934-00	FUSIBLE	1	5%	1/2W	F
R823 ⚠	1-212-934-00	FUSIBLE	1	5%	1/2W	F
R824 ⚠	1-212-958-00	FUSIBLE	10	5%	1/2W	F
R825 ⚠	1-212-958-00	FUSIBLE	10	5%	1/2W	F
R826	1-249-389-11	CARBON	4.7	5%	1/4W	
R827	1-249-389-11	CARBON	4.7	5%	1/4W	
R901	1-202-725-00	SOLID	3.3M	10%	1/2W	

Ref.No.	Part No.	Description
RV601	1-238-152-31	RES, VAR, CARBON 150K/150K (BALANCE)
RV602	1-237-471-41	RES, VAR, CARBOM 250K/250K(TONE TREBLE)
RV603	1-238-441-21	RES, VAR, CARBON 25K/500K (TONE BASS)
RV604	1-238-628-21	RES, VAR, CARBON (MOTOR)120KX2 (ATTENUATOR)
RV701	1-238-011-11	RES, ADJ, CARBON 470 (BIASS)
RV751	1-238-011-11	RES, ADJ, CARBON 470 (BIASS)
RY701	1-515-726-11	RELAY
RY702	1-515-626-11	(GX40ES).....RELAY
RY702	1-515-732-21	(GX50ES,GX60ES)...RELAY
RY703	1-515-626-11	(GX40ES).....RELAY
RY703	1-515-732-21	(GX50ES,GX60ES)...RELAY
RY710	1-515-726-11	(GX40ES,GX50ES)...RELAY
RY901	1-515-701-11	(GX50ES,GX60ES)...RELAY
RY901	1-515-720-11	(GX40ES).....RELAY
S301	1-554-303-21	SWITCH, KEY BOARD (SHIFT)
S302	1-554-303-21	SWITCH, KEY BOARD (3)
S303	1-554-303-21	SWITCH, KEY BOARD (2)
S304	1-554-303-21	SWITCH, KEY BOARD (1)
S305	1-554-303-21	SWITCH, KEY BOARD (0)
S306	1-554-303-21	SWITCH, KEY BOARD (6)
S307	1-554-303-21	SWITCH, KEY BOARD (5)
S308	1-554-303-21	SWITCH, KEY BOARD (4)
S309	1-554-303-21	SWITCH, KEY BOARD (MEMORY)
S310	1-554-303-21	SWITCH, KEY BOARD (9)
S311	1-554-303-21	SWITCH, KEY BOARD (8)
S312	1-554-303-21	SWITCH, KEY BOARD (7)
S313	1-554-303-21	SWITCH, KEY BOARD (DAT)
S314	1-554-303-21	SWITCH, KEY BOARD (CD)
S315	1-554-303-21	SWITCH, KEY BOARD (TUNER)
S316	1-554-303-21	SWITCH, KEY BOARD (PHONO)
S317	1-554-303-21	SWITCH, KEY BOARD (VIDEO 1)
S318	1-554-303-21	SWITCH, KEY BOARD (TAPE)
S319	1-554-303-21	SWITCH, KEY BOARD(FM TUNE MODE AUTO/MAN)
S320	1-554-303-21	SWITCH, KEY BOARD (BAND AM)
S321	1-554-303-21	SWITCH, KEY BOARD (TUNING +)
S322	1-554-303-21	SWITCH, KEY BOARD (PRESET TUNING +)
S323	1-554-303-21	SWITCH, KEY BOARD (FM MODE)
S324	1-554-303-21	SWITCH, KEY BOARD (BAND FM)
S325	1-554-303-21	SWITCH, KEY BOARD (TUNING -)
S326	1-554-303-21	SWITCH, KEY BOARD (PRESET TUNING -)
S327	1-554-303-21	SWITCH, KEY BOARD (ADAPTOR ON/OFF)

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Ref.No.	Part No.	Description
S328	1-554-303-21	SWITCH, KEY BOARD (MUTING)
S329	1-554-303-21	(GX40ES,GX50ES)...SWITCH, KEY BOARD (VIDEO 2)
S330	1-554-303-21	SWITCH, KEY BOARD (POWER)
S401	1-570-076-11	(GX60ES)...SWITCH, SLIDE (REMOTE TYPE)(REC OUT SELECTOR)
S601	1-572-261-11	SWITCH, PUSH (2 KEY) (LOUDNESS,SOURCEDIRECT)
S701	1-571-973-11	SWITCH, ROTARY (SPEAKERS)
S801	1-571-309-31	SWITCH (SPEAKER IMPEDANCE SELECTOR)
T901 ⚠	1-448-517-21	TRANSFORMER, POWER
T902 ⚠	1-449-970-11	(GX40ES)...TRANSFORMER, POWER
T902 ⚠	1-449-972-11	(GX60ES)...TRANSFORMER, POWER
T902 ⚠	1-449-973-11	(GX50ES)...TRANSFORMER, POWER
TM701	1-537-235-11	TERMINAL BOARD (SP)
VZ901 ⚠	1-807-293-31	VARISTOR SNR-14A221U

ACCESSORY & PACKING MATERIAL

1-501-224-00	ANTENNA, FEEDER
1-501-374-11	ANTENNA, LOOP
1-465-419-11	(GX60ES)...REMOTE COMMANDER (RM-P303)
1-465-420-11	(GX50ES)...REMOTE COMMANDER (RM-U203)
1-465-423-11	(GX40ES)...REMOTE COMMANDER (RM-S103)
2-181-754-01	(GX40ES)...COVER BATTERY
3-751-659-21	(US)....MANUAL, INSTRUCTION (ENGLISH)
3-751-659-31	(Canadian)...MANUAL, INSTRUCTION (ENGLISH,FRENCH)
4-925-079-01	(GX50ES,GX60ES)...COVER (6), BATTERY
*4-931-623-01	CUSHION
*4-931-624-01	(GX60ES)...INDIVIDUAL CARTON
*4-931-625-01	(GX50ES)...INDIVIDUAL CARTON
*4-931-626-01	(GX40ES)...INDIVIDUAL CARTON

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9-955-697-11
(Including 9-955-697-91)

Sony Corporation
Audio Group

English
90C0234-1
Printed in Japan
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Published by Customer Relations and Service Group